AREA FORM

AREA NAME: WHITE MOUNTAIN NATIONAL FOREST HIKING SHELTER SYSTEM

1. Type of Area Form
   Town-wide: ☐
   Historic District: ☒
   Project Area: ☐

2. Name of area: White Mountain National Forest (WMNF) Hiking Shelter System

3. Location: Shelters are generally located at elevation along hiking trails across the WMNF, which covers approximately 700,000 acres in the White Mountain region of New Hampshire (Appendix A). See specific shelter descriptions and maps for more detailed locations.

4. City or town: Albany, Bartlett, Beans Purchase, Benton, Bethlehem, Chatham, Cutts Grant, Franconia, Hanover, Jackson, Lincoln, Livermore, Low & Burbanks, Lyme, Orford, Sargents Purchase, Shelburne, Success, Warren, Waterville Valley

5. County: Carroll, Coos, Grafton

6. USGS quadrangle name(s): Bartlett, Carter Dome, Chatham, Crawford Notch, East Haverhill, Enfield, Franconia, Hanover, Jackson, Lincoln, Mt Carrigain, Mt Chocorua, Mt Kineo, Mt Moosilauke, Mt Tripyramid, Mt Washington East, Piermont, Shelburne, Smarts Mountain, South Twin Mtn, Stairs Mountain, Warren, Wild River

7. Dataset: SP Feet, NAD83. USGS scale: 1:24000

8. SP Feet and UTM reference: See attached table (Appendix A).

9. Inventory numbers in this area:

BEN0004, BEN0005, BEP0001, BEP0003, BEP0004, BEP0005, BET0021, BRT0034, CHR0002, CHR0003, CHT0001, CTG0001, FRC0009, FRC0010, HNO0007, HNO0008, JAC0007, LAB0046, LBG0002, LBG0003, LIN0004, LIN0005, LIN0006, LME0007, LVM0001, ORF0009, SGP0002, SGP0003, SGP0004, SHE0003, SUC0001, WAT0002, WRN0004, WRN0005

10. Setting: Shelters are dispersed along the approximately 1200 miles of mountainous backcountry recreational hiking trails across the WMNF, including 170 miles of the Appalachian Trail.

11. Acreage: Combined contributing shelter sites encompass approximately 6.82 acres within the approximately 700,000 acres of the WMNF acreage in New Hampshire

12. Preparer(s): Sarah Jordan, WMNF Heritage Program Manager. Reviewed by Rachel Kline, USFS Heritage Stewardship Group Architectural Historian

13. Organization:White Mountain National Forest

14. Date(s) of field survey: Intertmittently 5/6/2011-8/23/2012

15. **Location map**: See attached area location map and individual shelter location maps.

16. **Sketch map**

See individual shelter sketch maps attached.

17. Methods and Purpose

This shelter survey was undertaken in partial fulfillment of the terms of Memoranda of Agreement between the New Hampshire State Historic Preservation Office and the White Mountain National Forest (WMNF) as mitigation for the removal of the National Register of Historic Places-eligible Perkins Notch and Resolution shelters. The purpose of this document is to provide a historical context for the shelter system on the White Mountain National Forest, so that evaluations and decisions concerning individual shelters can be made with full consideration and understanding of the shelter system as a whole and its history. Archival research included White Mountain National Forest records, Appalachian Mountain Club and other outing club archives, late 19th-early 20th century hiking and White Mountain guide books, and conservation movement literature. Secondary literature reviewed includes the history and management of hiking shelters in the White Mountains and other regions, such as the Adirondack Mountains in New York and the Appalachian Trail corridor, and on the Conservation Movement of the turn of the 20th century which gave rise to recreational hiking in the White Mountains.

This document includes only shelters extant on the White Mountain National Forest, including the New Hampshire segment of the Appalachian National Scenic Trail, in 2010 at the commencement of the survey. Since the late 19th century, many other shelters have come and gone. A few are mentioned as examples of non-extant styles to illustrate the evolution of shelter design, but researching every shelter that ever existed in the White Mountains is beyond the scope of the current survey. Thirty-one of the forty-one shelters existing in 2010 were visited and documented with digital photographs, measured line drawings, and style and condition descriptions. Due to time constraints, priority was placed on shelters more than or nearing 50 years old. Newer shelters are documented less rigorously with recent photographs, but at least one representative shelter in all the common styles was visited, photographed, and drawn. Three shelters were removed or destroyed during the course of the study with no plans for replacement (Resolution and Perkins Notch were removed, Ore Hill burned down). One shelter (Garfield Ridge) was removed and replaced with a new structure. Maintenance projects, such as re-roofing and log replacement, occurred at multiple shelters during the course of the study. Appendix A provides a comprehensive summary of the shelters, including name, location, date, style, historic status, and page and figure references for this document.

Definition of "shelter"

For the purposes of this document, shelters are distinguished from cabins or huts in that they are intended to be unenclosed, with no door or other entranceway barrier. This definition aligns with the historic definition used by the Appalachian Mountain Club, who introduced the hiking shelter in the White Mountains, when they differentiated "open shelters" from their system of fully enclosed huts (Harrington 1926a: 317). The shelters included in this study are hiking shelters, intended for overnight use, as opposed to day-use picnic pavilions, also commonly referred to as shelters.

18. Geographical Context

The White Mountain National Forest encompasses approximately 750,000 acres in northern New Hampshire (700,000 acres in Coos, Carroll, and Grafton Counties) and western Maine (Oxford County). All of the existing WMNF shelters are in New Hampshire. The White Mountains, a northern range of the Appalachian Mountains, are characterized by rugged peaks and narrow valleys, with the largest alpine zone in the eastern United States. The Forest has forty-eight summits of 4,000 feet and higher, including the Presidential Range and Mount Washington, the highest peak in the Northeast. Glacial cirques, including Tuckerman Ravine on Mt. Washington,

characterize the eastern slopes of the Presidential Range. Additional evidence of glaciation may be seen in the U-shaped mountain passes, known as "notches." White Mountain weather is subject to rapid changes and extreme conditions. The White Mountain National Forest contains approximately 148,000 acres of Congressionally-designated Wilderness in six Wilderness Areas. The 170 mile Appalachian National Scenic Trail corridor in New Hampshire, one of the most challenging sections of the 2160 mile hiking trail, is managed by the WMNF and extends southwest to the Vermont border and northeast to the Maine border beyond the boundaries of the White Mountain National Forest.

19. Historical Background

> *The Adirondack lean-to is aesthetically pleasing. Favorably located it seems almost an emanation of the forest floor. As a shelter, its marginal protection against wind, rain, and cold enables you to revel in all the minor inconveniences and discomfort of camp life. You confront, in the precise meaning of that verb, the essential facts of life, more truly than Thoreau did in his Walden hut. The open front invites big thoughts. Out there, unscreened after the fire dies down, is the untamed wilderness of our ancestors on the continent. (Jamieson, in The Adirondack Reader.)*

Since the arrival of the first Europeans in New England in the Seventeenth Century, New Hampshire's White Mountains have represented a "wilderness" that offered opportunity for exploration and adventure. Beginning in 1677, early maps identify the area as the "White Hills" or "White Mountains," but little detail of the topography of the area was known or even considered important until the rise of tourism in the area in the second quarter of the nineteenth century (Apt n.d.). In 1642, the first Europeans to ascend Mount Washington included Darby Field and others drawn to the area for the challenge and mystery of the unknown that it represented, as well as reports of "shining stones," but the region offered little in terms of political or economic interest to the early colonists in coastal settlements (Pendery and Wallace 1979: 22-23). Archaeological evidence to date indicates that native Abenaki people camped along natural travel routes through the White Mountains between their settlements in the river valleys adjacent to the mountain ranges, most likely visiting the mountains to hunt and fish, procure raw materials, or for spiritual reasons.

Euro-American towns began to develop on the peripheries of the mountains in the late eighteenth century as farmers from the more densely populated areas of southern New Hampshire and Massachusetts began to move north, establishing small subsistence farms. Around the same time, scientists such as Jeremy Belknap, Edward Tuckerman, and Joshua Huntington began making expeditions to the area and documenting its botanical and geological phenomena. Belknap, writing in 1792, described how a traveler in New Hampshire, though in his estimation by then there were "few places so remote from public houses, or hospitable inhabitants, as to oblige the traveller to lodge in the woods" could, equipped with only an axe, construct a temporary bark lean-to in one hour (Belknap 1813: 60-61). As population density in the rapidly industrializing cities of Boston and New York increased, people began to view visiting the mountains as an escape from modern city life. By 1819, the Crawford family had cleared a trail to the summit of Mt. Washington, and led parties of tourists on foot or horseback. This trail, the Crawford Path, is still in use today as part of the White Mountain National Forest's

trail system—celebrated as the longest continuously-used hiking trail in America. The Crawfords reportedly attempted to erect permanent shelters on Mt. Washington in the 1820s, but these were short-lived (Dickerman 2013: 19-20). By the latter part of the nineteenth century, railroad access to White Mountain towns (Gorham, Plymouth, and Littleton by the 1850s, and through Crawford and Franconia notches in the 1870s) led to a mass influx of summer tourists from the cities of Boston and New York. Grand hotels were built throughout the mountains, accommodating thousands of summer visitors at any given time by the 1870s (Wallace and Pendery 1979: 95). Most summer tourists were wealthy urbanites, and expected mountain hotels to provide a lifestyle of comfort and luxury, even on mountain summits; hotels were built on Mt. Washington, Mt. Moosilauke, Chocorua, Kearsarge North, and Lafayette. Bridle paths, then carriage roads, and in the case of Mt. Washington after 1869 the Cog Railroad, provided access to these hotels.

At the same time that tourists began to flood the White Mountains, large-scale logging operations were stripping the mountains of timber, leaving unsightly clearcuts and slash and contributing to large forest fires. In the years between 1850-1920, a national political and cultural movement of heightened conservation conscience developed among the urban middle-class, based largely on a growing appreciation for the importance of nature as an economic, aesthetic, and spiritual resource and, with the closing of the American frontier in the 1890s, the conviction that this resource was fragile and finite. This movement led to unprecedented public and private initiatives aimed at promoting the wise and scientific use of natural resources, and the preservation of natural beauty. The creation of the US Forest Service in 1905 and White Mountain National Forest in 1918 was a product of this movement and its growing recognition of the consequences of deforestation. Elements of the conservation movement could be found in all aspects of society, from art and literature to sports and recreation, politics, science, and spirituality and morality. That the movement was popular primarily among the educated urban elite meant that the "back to nature" behavior it promoted was centered on the spiritual and recreational values they perceived in nature, rather than the working relationship to nature of rural farmers and woodsmen (Schmitt 1969). Turn of the century urbanites viewing wilderness from the perspective of vacationer rather than conquerer demonstrated a shift from the pioneer mindset of taming and civilizing wild places, to a new focus on revering and preserving them (Nash 1967). Travel literature celebrating natural beauty, reflective and analytical writings exploring the relationship of humans and nature, and popular nature essays and nature-based fiction and poetry with their implicit perception of nature as a locus of moral authority all contributed to the promotion of camping and "woodcraft" as forms of recreation and character development (Library of Congress, American Memory). The resulting popular interest in the activities of hiking and mountaineering-- and the proliferation of amateur clubs to sustain them-- is particularly relevant to the development of shelters in the White Mountains.

In 1876, an urban group of wealthy outdoor adventurers in Boston formed the Appalachian Mountain Club (AMC), an organization devoted to the exploration and scientific investigation of remote areas, with a focused interest on the nearby White Mountains (Waterman 1989). The AMC was the largest and farthest reaching of the clubs, but other more localized White Mountain outdoor clubs of the period include, among others, the Wonalancet Outdoor Club (WODC, founded 1892), the Dartmouth Outing Club (DOC, founded 1909), and the Randolph Mountain Club (RMC, founded 1910), whose members were all interested in promoting the enjoyment of hiking and wilderness, building new hiking trails, and restoring trails damaged by logging operations.

From the beginning, as trail club members worked to build and enhance hiking paths, they built lean-to shelters of poles covered with bark for their base camps (Figure 1), just as earlier explorers had. Trail building in its simplest form involved "stringing" a proposed route by allowing a spool of string to unwind as the trail designers identified the route, and then clearing the route of brush and trees and blazing the trail. More laborious work involved grading the route, placing rock steps, building stone cairn trail markers above treeline, providing water drainage away from wet spots in the trail, and constructing bridges or placing stones at stream crossings. Shelter was necessary in wet weather, and constructing a wooden lean-to of available materials in remote areas was preferable to carrying the heavy and bulky tents available at the time. The first named shelters were built in 1876 on Lowe's Path on Mount Adams by Charles Lowe and William Nowell of the Appalachian Mountain Club, and the shelter on Nowell's Ridge was visited by 54 people that first year (Therrien 1987: 6). Early bark shelters were temporary structures not intended for long-term use, but the idea for a more permanent network of shelters was first proposed in the 1876 annual report of the AMC, where Nowell wrote:

> It is suggested that permanent camps be established by members of the Club at such points of interest in its work as Mount Adams or the East Branch of the Pemigewasset. Such camps will serve as centers for the working parties and may be built so as to last several years. A bark camp, well constructed, would do service, with a few repairs, more than one summer; but a log and board camp much more permanent can be made at a trifling cost. (Nowell 1876: 56)

Fifty years later, the 1926 report on the AMC trail system indicates progress:

> …for a necessary corollary of the trail system itself is a system of shelters where those using the trails may escape from wind, rain, darkness, and fatigue. And so, located in strategic spots, by unfailing water springs, we have now fifteen open shelters, which, taken with the huts and camps… make it impossible for a tramper anywhere on our trail system ever to be beyond reasonable walking distance from a comfortable place to spend the night or escape from stormy weather. (Harrington 1926a: 317)

In addition to the open lean-to shelters, beginning in 1888 the AMC built a series of fully enclosed higher-capacity hostels or "huts," modeled after those of the Swiss Alpine Club in Europe, and which it continues to operate today. In 1997, the AMC hut system was determined eligible as an historic district for listing on the National Register of Historic Places. Huts, shelters, and trails were constructed on land acquired by the AMC, or more often, it seems, with informal permission from the logging companies who owned the land. Early shelter styles of the AMC included the log pole lean-to covered with birch bark, or simple log shed structures (see Architectural Description section below for detailed descriptions and examples). Bedding of spruce boughs typically covered the floor.

The US Forest Service, authorized under the Weeks Act of 1911, began to acquire land from private owners in the White Mountains in 1914, to be officially designated as the White Mountain National Forest in 1918. The AMC and other local outdoor clubs and organizations played a vital role in the passage of the Weeks Act, advocating for public ownership of the White Mountains, which were being clearcut and burned as a result of large unregulated logging operations. In 1917, the AMC signed an agreement with the US Forest Service, and the White Mountain National Forest acquired its first two shelters and took on responsibility for maintenance of some of the existing trails (Therrien 1987: 8). Shelters on the White Mountain National Forest are either managed directly by one of the three Ranger Districts on the Forest, or are operated under Special Use Permits issued by the Forest Service to trail clubs or other organizations, such as the Appalachian Mountain Club, Dartmouth Outing Club, and Randolph

Mountain Club. Shelter locations in the White Mountains were historically chosen for a variety of reasons: Some were built for convenience during a phase of trail construction, and then continued to be used by hikers; some were built as refuges in response to the deaths of lost or stranded hikers; some were built as "destinations" at scenic spots or mountain peaks; some were built as private camps, and some were built to fill in gaps between existing shelters and complete the "long line of camps and shelters across the White Mountains" (Harrington 1924a: 513). By 1924, the AMC had in place a series of shelters "which will afford comfort to the traveler at the end of every day, should he wish to go even as far as from Mt. Moosilauke to the Grafton Notch" (Harrington 1924b: 88). The Forest Service began to construct shelters in the White Mountains around 1920, first developing a style of its own locally on the WMNF, and later using approved regional or national USFS styles (detailed descriptions and examples are provided below in the Architectural Description section).

The Dartmouth Outing Club began a shelter-building project in 1929, with a series of twelve shelters proposed in addition to their earlier Tunnel Brook shelter. The Forest Service granted permission for sites within its boundaries. Eleven shelters were built by the DOC in the 1930s, and nine more were built between 1955 and 1981, some as replacements of earlier shelters (Hooke 1987: 108). With its focus on skiing and winter outdoor recreation, the DOC developed a distinctive shelter style intended for winter use (descibed in the Architectural Description section).

The Appalachian National Scenic Trail (AT), a continuous hiking trail from Maine to Georgia, was first proposed in 1921, and trails and shelters of the AMC and DOC were incorporated into the New Hampshire section of the trail (Appalachian Trail Conference 1965: 5). In 1938, an agreement with the National Park Service and US Forest Service created the Appalachian Trailway, an undeveloped, roadless corridor one mile on either side of the trail, with a system of campsites, lean-tos, and simple shelters (Appalachian Trail Conference 1939: 9). Beginning in the 1930s, The Appalachian Trail Conference (later renamed the Appalachian Trail Conservancy) issued guidelines and suggested designs for AT shelters. Under the National Trails System Act of 1968, the Appalachian Trail was designated a National Scenic Trail. Shelters were an important part of the AT from its conception in the 1920s, and have remained so. Shelters serve "thru hikers" hiking the length of the trail by providing landmarks and a place to meet and congregate with other hikers, as well as a way to maintain contact with one another through the log books often found in AT shelters (Therrien 1987). More than 250 Shelters are spaced one day's hike apart along the length of the trail from Maine to Georgia, and display a great diversity in design (see the interactive map at www.appalachiantrail.org and the Shelter Gallery at www.whiteblaze.net). The White Mountain National Forest administers the nearly 170 miles of the Appalachian Trail that run across New Hampshire, including fourteen shelters. In the mid 1970s, a shelter along the Appalachian Trail in the White Mountains might see more than 1400 visitors over the 2 month period from July to August (Therrien 1987: 21).

The White Mountain National Forest began to construct shelters of its own in the 1920s, escalating in the 1930s. An influx of labor at this time, provided largely by the Civilian Conservation Corps (CCC), made the construction of infrastructure such as shelters and trails-- along with campgrounds, picnic shelters, and roads-- a possibility for the first time. The CCC was established in 1933 by President Franklin Roosevelt as a public works program designed to provide relief from the Great Depression by offering employment to young unmarried men while helping to restore depleted natural resources. Seventeen camps were established in the White

Mountains over the nine years the program existed (Therrien 1987: 10). The Forest Service supervised the projects undertaken by the CCC on the WMNF, and a major component of the program was the construction of recreation facilities. In 1935, the Forest Service issued recreation guidelines. The Eastern Region recreation handbook specified that "In hiking country, overnight shelters will be provided at strategic points in the trail system. Such shelters will be located at inspiring scenic spots approximately one day's hike apart… Such shelters usually will be Adirondack type with a fireplace built to face the open side…" (USDA 1935: 58). Twenty-one shelters were built by the CCC, some new and some renovated or replaced (Therrien 1987: 10). Many of the CCC shelters were originally intended for winter use as well as summer hiking use, as skiing became increasingly popular during this period. In 1935, the White Mountain National Forest Recreational Plan noted that shelters were heavily used throughout the forest, and that more trails and shelters would "invite increased numbers to enjoy the benefits of mountaineering" (WMNF 1935, Section II).

As the shelter network expanded, constant maintenance, replacement, and relocation of shelters occured, as detailed in the annual reports of the AMC. Shelters were located near a reliable water source, and through the 1930s, most were located in a protected spot, often facing a large boulder or the side of a mountain for shielding from the elements and so that heat from a fire could be reflected into the shelter (Figure 2; see Figures 64, 65, 66 for other examples). Later shelters were more exposed, situated to take advantage of scenic views rather than for purely practical reasons (Blood 1939: 428). Shelters built by the Forest Service tended to be located at scenic spots (see Figure 45). Forest Service shelters were also sometimes built to replace abandoned logging camp structures that were being used by hikers. Early on and through the 1940s or 1950s, shelters were often placed immediately adjacent to or even in the middle of the trail, with hikers passing by along the edge of the shelter (see Figure 28). Later shelters were generally built off of the main hiking route, accessed by a short spur trail. The CCC was discontinued on the WMNF in 1942 with the start of World War II, and little shelter construction or maintenance occurred during the war (Therrien 1987: 11).

In 1956 the Forest Service estimated there would be an increased demand for shelter facilities by 1960 (Therrien 1987: 20). By then, advances in hiking gear, such as lightweight packs and tents, and the construction of the interstate highway system, made hiking in the White Mountains more accessible than ever before (Therrien 1987: 11). Starting in 1955, there was a push by the Appalachian Trail Conference (ATC) to complete the network of shelters along the Appalachian Trail (Appalachian Trail Conference 1965: 5-6). National Forests along the length of the trail built new shelters in response as part of the USFS's "Operation Outdoors" 5-year recreation plan to modernize facilities and provide for the 66 million recreational visits expected annually by 1962; the Rattle River shelter on the AT was built by the WMNF in 1963 as part of this effort (Kline 2014; Oglesby 1962; MacMackin 1962: 10). Campsite use on the WMNF peaked in the mid-1970s, based on records of visitor numbers kept by AMC shelter caretakers (Therrien 1987: 20). At the same time, increased availability and use

Overflowing garbage pit at the Liberty Spring shelter in 1962. Garbage or can pits were a common feature at shelters until the 1970s. University of New Hampshire archives, Durham, NH.

of lightweight tents suggested a declining need for shelters, though there was still a perceived need for them for winter camping, and they remained popular trail landmarks and meeting points, particularly on the Appalachian Trail (James 1970: 29-30).

By 1970, overcrowding, sanitation, and resource damage around shelters had become significant problems (James 1970: 24). Between 1970 and 1975, major renovations to the shelter system were undertaken to address these issues. The "Carry in - Carry out" program was initiated to reduce the need for garbage pits at shelters and reduce water contamination. Forest Service backcountry patrollers were empowered with the ability to issue citations for infringements on the rules. The Forest Service and AMC increasingly used site caretakers, tent platforms, hiker education programs, restricted areas and law enforcement in an attempt to reduce impacts at shelter sites as part of a "Campsite Betterment Plan" (Therrien 1987: 33-34). Some shelters were rebuilt, and some were removed because of pollution, vandalism, or deterioration. Others were removed because they were inside the boundaries of the four Wilderness Areas designated under the Wilderness Act of 1964 (Therrien 1987: 12-13). Additional capacity at shelter sites was provided in the form of wooden tent platforms beginning in the 1970s, and at some sites, such as Liberty Springs, Franconia Brook, and Trident Spring, the shelter was replaced altogether by a complex of tent platforms.

Ned Therrien, the Public Information Officer for the White Mountain National Forest wrote a paper, completed in 1987, on "Hiking Trail Shelters and Their Management on the White Mountain National Forest" as part of a professional development course in the Outdoor Recreation Management Program at Clemson University. Therrien counted thirty-six shelters in existence (though he excluded the 6 AT shelters beyond the WMNF boundary and lumped the Hermit Lake shelters as one-- the number was actually 49), with nine of these inside Wilderness. A lack of on-going maintenance meant that sewage and resource damage were again becoming problems at many shelter sites (Therrien 1987: i). In addition to an overview of the shelter system and its history, Therrien made recommendations for the ongoing management of the shelter system. One of the assumptions Therrien listed for his management recommendations was that "Adirondack shelters have become an accepted and important part of the recreation experience in the White Mountains, especially along the Appalachian Trail. People using the White Mountains will expect shelters to be part of the spectrum of recreation opportunities available to them." (Therrien 1987: 43) Therrien recommended that a site management plan be developed for each shelter and surrounding vegetation, travelways, and sewage and water quality, as well as the use of caretakers, volunteers, and informational displays. He also added that "Unless there are good reasons for removal the existing shelters should be kept. The shelter camping experience is a unique recreation opportunity." (Therrien 1987: 56) Therrien examined each existing shelter, and recommended that it be either left in place, reconstructed at a new site, or be removed altogether and the site rehabilitated to a natural condition. He concluded that nine shelters of the 36 he included in the study should be removed, mostly because they were within Wilderness Areas (Therrien 1987:45). In 1988, these recommendations became forest policy in a memorandum by the Forest Supervisor, although none of the shelters slated for removal had been evaluated for historical significance (Roenke 1991: 35). The policy appears to have been followed haphazardly, however: By the end of 2014, ten of the 36 shelters Therrien studied had been removed, one relocated, and four others replaced, though not necessarily in accordance with Therrien's recommendations. Rather than a holistic forest-wide approach, decisions were instead made at the Ranger District level based on evolving circumstances.

Since the 1980s, the White Mountain shelter system has been shrinking as shelters have been removed and not replaced under various initiatives to enhance wilderness character and reduce management costs, but recent visitor use data analysis for AMC and RMC sites indicates that shelter use was again on the rise, peaking slightly around 2005 (DuRocher 2011). The biggest threats to the existing historic shelters from a management perspective are the perceived conflict between historic preservation and Wilderness values, and the cost and burden of maintaining aging structures in remote locations. The general management trend has been toward less developed backcountry sites with fewer structures. Some shelters have been replaced with lower-maintenance tent platforms or, increasingly, hardened gravel pads. Other shelters, primarily in Wilderness Areas, have been removed and the sites naturalized. Several popular shelters, especially along the Appalachian Trail, have been replaced with new structures (four since 2007). In 2008, the WMNF conducted a Recreation Facility Analysis to reduce deferred maintenance costs, in large part by reducing existing facilities. Although shelters were not singled out for elimination, the district recreation staffs identified shelters for removal based primarily on the burden of maintaining them. Of the 18 shelters maintained by the USFS, eight were slated for removal, two for replacement, and eight for retention and maintenance (White Mountain National Forest 2008). The Appalachian Mountain Club has replaced three of the shelters they manage since 2007, and repaired two. The Dartmouth Outing Club maintains seven shelters, with the oldest existing shelter dating to 1973.

In the mid-2000s, the Appalachian Trail Conservancy began to address concerns that lean-to shelters were being replaced by trail clubs with larger and more amenity-laden shelters with modern designs and materials that were not in keeping with the desired primitive Appalachian Trail experience (Appalachian Trail Conservancy 2007). There was also concern that the total number of AT shelters had increased 14% between 1971 and 2006. The ATC guidance issued in 2007 favored designated camping areas over new shelters, and suggested shelter capacities be limited to 15 people. Rustic shelter designs with small footprints constructed of primitive materials were emphasized (Appalachian Trail Conservancy 2007). The existing network of AT shelters displays great variety of shelter designs (as viewed on the ATC's interactive map at http://www.appalachiantrail.org/hiking/find-a-hike/interactive-map), but most shelters in the White Mountains continue to be variations of the traditional Adirondack lean-to.

Although shelters have been routinely replaced at existing sites in response to deterioration, environmental impacts, and changes in shelter design and management preferences, new shelter construction (a new shelter in a new location) has been minimal in recent decades. The last shelters added to the system of White Mountain shelters are Jeffers Brook on the Appalachian Trail, built by the DOC in 1981, and the short-lived Ore Hill shelter (2001-2011), also on the Appalachian Trail. The trend has been instead toward the removal of shelters.

20. Applicable NHDHR Historic Context(s). The primary context is number 78: Outdoor recreation in New Hampshire. Other associated contexts are: 76. Winter recreation and the ski industry, 1890-present; 110. The federal government in New Hampshire, 1776-present; 111. Fighting the Depression in New Hampshire: The CCC, WPA, and other public works programs 1929-1940.; 115.

Social organizations in New Hampshire; 135. The land conservation movement in New Hampshire.

21. Architectural Description and Comparative Evaluation

In the 1890s, hiking shelter design developed beyond the simple pole lean-to built on the fly for temporary use (Figure 1). The structures that evolved during this period are often called "Adirondack" shelters because they were also built during the same period in New York's Adirondack Mountains and are considered part of a larger architectural style developed there: "Adirondack Rustic" architecture (c.1875-1930) generally refers to buildings built of native materials, such as logs and stone, designed to blend into their woodland setting. The term is applied equally to the elaborate family compounds, or "Great Camps," of the Adirondack region, National Park lodges, and simple lean-to shelters (Smith & Youngken 1986). The Rustic Style was adopted and expanded by the architects designing recreational structures and landscapes in National Parks and National Forests in the 1920s. The public works programs of the 1930s, such as the Civilian Conservation Corps, further utilized and expanded the style for recreational and administrative structures built on public lands (Tweed, Soulliere, and Law 1977).

In his 1991 report "Interpreting Historic Values of High Elevation Recreation Shelters and Cabins on the White Mountain National Forest: Past, Present, and Future," former WMNF Heritage Program Manager Karl Roenke identified nine styles of shelter in use on the forest (Roenke 1991). Current examination of surviving shelters, historic photographs, and architectural plans suggest that this typology can be expanded to sixteen defined styles extending back to the first permanent shelters built around the turn of the 20th century, each in use at multiple locations over a period of several years. As stated above, for the purposes of this study, "shelters" are distinguished from cabins or huts in that they are intended to be unenclosed, with no door or other entranceway barrier. An overview of each style is given below, followed by individual shelter descriptions for those styles with extant shelters (summarized in Table 1). Descriptions of nonextant styles, with examples, are included for reference. Photos, maps, and drawings of the shelters are appended to the document, with figure numbers referenced in the text. Beyond the sixteen common styles, described below in roughly chronological order, is the occasional unique shelter design. Descriptions for existing unique shelters are grouped at the end of the section. Additional photographs, drawings, and historical notes for all shelters included, as well as others that were nonextant by 2010, are available in the WMNF cultural resources site files located at the Supervisor's Office in Campton, NH, filed by Forest Service site number (see Appendix A).

Table 1. White Mountain National Forest Hiking Shelter Styles

Includes all 41 shelters extant on the WMNF when the current study began in 2010. Those no longer standing in 2015 are noted.

Style	Extant Shelters	Date
Birch Bark	NONE	c.1900
Log Shed	NONE	1910s
Small-Log Saltbox	NONE	1920s
FS Vertical and Horizontal Log	Mountain Pond Wild River Province Pond	1922 1922 1934
USFS Plan for Forest Camp Adirondack Shelter-1935	Coppermine Mt. Langdon	1935 1936
"Plans for Appalachian Trail Lean-to" – 1939	Perkins Notch	1957 (removed 2011)
Gabled	NONE	c.1940
DOC Large Overhang	NONE	c.1930-1970
WMNF Adirondack Shelter-1958	Camp Penacook Sawyer Pond Dry River #3 Flat Mtn Pond	1957 1958 1963 1964
AMC Vertical Pole	Ethan Pond	1957
"24 Ft Adirondack Shelter, 8-Man"-1965 (FS Drawing No. 7300-60050)	Hermit Lake 1 Hermit Lake 2 Hermit Lake 3 Hermit Lake 4 Three Ponds Hermit Lake 5 Rocky Branch #2 Rocky Branch #1	1965-1967 1965-1967 1965-1967 1965-1967 c.1966 1967 c.1967 (removed 2015) 1974
USFS 16' Appalachian Trail	Rattle River Trapper John	1963 1973
USFS "Adirondack Shelter, Five Man" (FS Drawing No 7300-60059)	South Baldface	1967
USFS "Adirondack Shelter, 10-12 Man" (FS Drawing No. 7300-60131)	Hermit Lake 6 Hermit Lake 7 Hermit Lake 8	1967 1968-1969 1968-1969
Mahoosuc	Gentian Pond Guyot Imp Log Cabin Kinsman Pond	1974 1977 1980 1985 2007
DOC Modified Appalachian Trail Lean-to	Beaver Brook Ore Hill Moose Mountain	1993 2001 (burned 2011) 2004
Unique Design	Resolution The Perch Blue Brook Jeffers Brook Hexacuba Velvet Rocks Eliza Brook Garfield Ridge	1932 (removed 2011) 1948 1959 (relocated 2009) 1981 1989 2007 2010 2011

Birch Bark

The first shelters intended for recurring use were built in the period around 1900, and were built by mountaineering clubs of saplings with a shed roofline, and covered with sheets of birch bark (Roenke's Style 9). These shelters required frequent maintenance and repair and were often not long-lived, but were recorded in period photographs (Figure 2; see also Figure 64). In at least two cases, more elaborate and unique birch bark shelters were constructed by the Randolph Mountain Club (at Cascade Camp and The Perch; see Figure 146).

Log Shed

Shelters built by the clubs in the 1910s tended to be of unpeeled horizontal logs, notched at the back corners. They tended to have a long, low shed roof and often a completely open front. Based on the surviving photos, they were built directly on the ground surface with little or no foundation (Figure 3; see also Figure 39, Figure 115, Figure 141). Roenke called this Style 8.

Small-Log Saltbox

By the 1920s, shelters built by the clubs were of peeled logs, generally of small diameter (reflecting the young age of the forest after intense logging in many areas), notched at all four corners, providing a partial front wall. In 1924, "the most economical and durable type construction discovered up to date" for AMC shelters was described as "peeled logs laid notch downwards, and a bark roof" (Harrington 1924: 512). These shelters took on the asymmetrical saltbox roofline that became common in later styles. They were built on stacked stone foundations (Figure 4; see also Figure 112, Figure 128, Figure 167).

Forest Service Vertical and Horizontal Log

Also in the 1920s, the Forest Service began to build shelters of its own on the newly-established White Mountain National Forest. The earliest Forest Service design, and the earliest design for which there are extant shelters, is the style identified by Roenke as Style 4. It has a saltbox roofline and a completely open front. Its distinguishing characteristic is the use of large (8-10 inch) diameter vertical logs for the back and lower side walls, with horizontal logs above the vertical logs on the side elevation. Small log angle braces appear to have been added later in the front opening of several of these shelters. Historic photos show both asphalt roll roofing and wood shakes as roof covering. Several shelters of this style had been built by 1922 (Fritz 1922:62). The surviving examples of this style are Mountain Pond Shelter, Wild River Shelter, and Province Pond Shelter. Historic photographs indicate that this style was also used at Russell Pond and for the "Hermit Lake A" shelter. The shelter known as "Hermit Lake A" was built by the Forest Service in 1920, according to correspondence in USFS files. A photo postcard shows the shelter c.1923 (Figure 5). A hand-drawn design dated 1919 found in the WMNF files for the Hermit Lake shelter is similar in proportion to this style, although it shows only vertical logs in the side walls. It is likely that the horizontal logs in the gable were a later modification of this 1919 design, and that it was first built in 1920 at Hermit Lake A. The earliest photograph of the Wild River shelter appears to date from the 1920s, and the 1922 *White Mountain Guide* states that the "USFS plans to construct a new log shelter hut early in 1922" on the north side of Mountain Pond (AMC 1922: 80). In the Biennial Report of the New Hampshire Forestry Commission in 1922, WMNF Supervisor J.J. Fritz states that "..the Forest Service has provided shelters at Hermit Lake, Wild River Ranger Station, Mountain Pond in Chatham, Camp 19 in the Upper Ammonoosuc valley, and Russell Pond in Woodstock" (Fritz 1922:62). Mountain Pond and Russell Pond each appear as "F.S. Camp" on the 1924 WMNF map. By 1929, Hermit Lake, Russell Pond, and Mountain Pond are each labeled as "USFS Shelter." The Province Pond

shelter first appears on the 1934 WMNF map after the Forest Service acquired the property; this may have been the last shelter built of this style, as a new style was introduced the following year (See *USFS Plan for Forest Camp Adirondack Shelter-1935* below).

Mountain Pond. Built 1922. CHT0001, Chatham. Saco Ranger District. Contributing.

The Mountain Pond Shelter is located on the north bank of Mountain Pond in the town of Chatham, about 1 mile on the Mountain Pond Trail from the Mountain Pond Trailhead on Slippery Brook Road (FR 17, AKA Town Hall Rd at the southern end), 6.3 miles from NH 16A (Figure 6). Based on 19th century maps, the Mountain Pond area was in a relatively remote and undeveloped part of the town of Chatham until the construction of the East Branch Railroad by the Conway Lumber Company from 1916-1920 (Gove 2001:122). The railroad bed eventually became an auto road, passing within a half mile of the western end of the pond, and making it easily accessible for recreation. A hiking trail also accessed it from the east for those coming from the village of Chatham (AMC WM Guide 1922: 79-80). A cabin was built on the south side of the pond by the Civilian Conservation Corps in the 1930s for winter use by Nordic skiers.

The Mountain Pond Shelter is an open-front Adirondack-style log lean-to (Figure 7). It is one of the two oldest shelters remaining on the White Mountain National Forest (along with the Wild River Shelter), and is representative of the earliest extant shelter design on the forest. It is the first shelter design built by the USFS after the creation of the WMNF in 1918, and was probably designed by WMNF recreation staff. Mountain Pond originally had a wood shake roof, which was later replaced by a metal roof (Figure 8). At the time of survey, Mountain Pond shelter's dry-laid field stone foundation had collapsed and/or been removed from under the front ends of the side sill logs. Half-log cross-bracing was installed on the exterior of the back wall of the Mountain Pond shelter at an unknown date. The vertical logs had oakum chinking between them, though this is missing in places leaving gaps of approximately 1 inch between the logs. The ends of the log roof members have bottle caps and cartridge casings pounded into them, some forming initials or patterns. The floor boards have been weathered, carved, and worn to a patina, and the logs have graffiti dating back to 1930, and possibly 1927. In August 2014, the Saco Ranger District replaced rotten sill logs and vertical posts, restacked the stone foundation, and replaced the metal roof (Figure 9; WMNF CRRR# 2014-05-02). In front of the shelter is a dry-laid stone fireplace with metal grate, and about 1m SW of the fireplace is a small round depression about 2m in diameter with small fragments of aqua, brown, and painted label clear bottle glass visible on the surface. The privy, NW of the shelter, is a plywood structure on a concrete block foundation with a corrugated plastic roof, approximately 20 years old (Figure 10).

Wild River. Built 1922. BEP0004, Beans Purchase. Androscoggin Ranger District. Contributing.

The Wild River Shelter is located within the WMNF's Wild River Campground, on the southeast side of Wild River Road (Figure 11). The road leading to the campground is the bed of the Wild River logging railroad operated by the Wild River Lumber Company and Hastings Lumber Company from 1891-1917 (Belcher 1980: 26). The road currently dead-ends at the campground, the site of an old logging camp, and a hiking trail continues on the railroad bed. The shelter was built at the site in 1922, and the area was described as a campground as early as 1925 (Fritz 1922; AMC 1925: 92). The 1935 WMNF Recreation Plan describes the site: "…an old Adirondack shelter, a spring, toilets, and a guard station exist in a small meadow at the end of the road. No additional facilities are contemplated since intensive development would ruin the charm of the area." Today

the campground has twelve developed sites and two vault toilet buildings, but remains one of the smaller, quieter, and more remote campgrounds on the WMNF. The Wild River shelter is located at camp site #4, adjacent to but facing away from the road (Figure 12).

The shelter has a saltbox roofline, a completely open front, and a field stone foundation (Figure 13). The shelter appears weathered, but has changed little since photographed in the 1920s and 1930s (Figure 14). Based on historic photographs, it appears that it originally had asphalt roll roofing, replaced at least twice with wood shakes/shingles. Small log angle braces were added in the front opening prior to 1958 (Figure 15). The Wild River shelter has a table built into the right side of the open front under the overhang, and this feature appears in all the historic photographs. Originally there was a stone fire ring in front of the shelter, but now there is a metal fire box and grate. The shelter has been stained dark brown, probably well after its construction.

Province Pond. Built 1934. CHT0002, Chatham. Saco Ranger District. Contributing.

The Province Pond shelter is located on the north bank of Province Pond, about 3 meters west of the Province Brook inlet. It is accessed by of a short spur trail branching west from the Province Brook Trail/Corridor 19 Snowmobile Trail, about 1.6 miles from the trailhead on Peaked Hill Road (Figure 16). The shelter has a saltbox roofline and a completely open front, and a field stone foundation (Figure 17). The shelter is constructed of locally harvested hemlock (average diameter 10”). Gaps between logs were filled with oakum on the interior and small branches nailed into the exterior, but both are missing in places, leaving open gaps. Brown stain appears to have been applied most recently in the 1980s, based on the dates of graffiti over and under the stain. The fieldstone foundation has many dislodged stones, and the back sill log is in direct contact with the ground surface and showing signs of rot. The shelter currently has a weathered metal roof (Figure 18). The previous privy was replaced by an open-air toilet about 50m northwest of the shelter in 2009. A depression from the filled-in privy is visible 4m north of the existing toilet (Figure 19). The Province Pond shelter first appears on the 1934 WMNF map after the Forest Service acquired the property. The Province Pond shelter is believed to be the last shelter built in this style on the WMNF, and may have been constructed by the Civilian Conservation Corps.

USFS Plan for Forest Camp Adirondack Shelter-1935

In 1935, the WMNF began to build shelters that followed the new standard “USFS Plan for Forest Camp Adirondack Shelter” (Figure 20). Roenke identified this as Style 1. These shelters, 16’4” wide by 11’6” deep, and 9ft high at the ridgepole, were built of peeled horizontal logs 8-10 inches in diameter, notched at the back corners with half-cut log joints. This style has a completely open front with an overhanging roof, and sits on stone piers. The plan calls for wood shingle roofing. The Civilian Conservation Corps built several shelters according to this plan. Two of these are still standing: Coppermine shelter (1935) and Mt. Langdon (1936). Other shelters built in the 1930s and 1940s known to be of this style were Greeley Pond, Pequawket, Desolation, and Baldface Circle (see Figure 101).

Coppermine. Built 1935. FRC0009, Franconia. Pemigewasset Ranger District. Contributing.

The Coppermine shelter is located on the Coppermine Trail, 2.3 miles from intersection of Coppermine Rd and NH Rt. 116 (Figure 21). The Coppermine Trail was built by the AMC in 1881 to access Bridal Veil Falls, and developed into the Coppermine Ski Trail by the Civilian Conservation Corps in the 1930s, descending from the Taft Trail on Mittersill Peak to Bridal Veil

Falls and on to NH Route 116. The Coppermine shelter was intended for use by both hikers and skiers (Scott 1884: 78; WMNF 1935 Rec Plan, 1951 WMNF Administrative Atlas). The shelter sits at the top of the southwestern bank of Coppermine Brook, about 500ft northwest of the pool at Bridal Veil Falls (Figure 22).

The Coppermine shelter is one of two surviving shelters built according to the USDA Forest Service plan for a "Forest Camp Adirondack Shelter" (Figure 20). Some of the logs are slightly smaller than the recommended 8 inch diameter, which is made up for by use of an additional log in the side wall, and the bottom 10-inch logs do not extend out as far in front as the plan indicates (they may have been sawed off at some point after construction), but otherwise the plan was followed quite closely, with cut log joints in the back corners, and a vertical half log over the front ends of the logs (Figure 23). The front of the shelter is completely open, with an overhang of approximately 2'6." It has a wooden plank floor/sleeping platform of 1"x12" boards, and is built on stone corner piers, with log piers sitting on flat stone bases supporting the floor. The wood shingle roof has been covered with a standing seam metal roof (Figure 24). A stone fireplace sits in front of the shelter, slightly to one side because of the drop off to Coppermine Brook. The shelter has no privy associated with it. The interior logs and boards of the roof are covered with graffiti, both carved and written in charcoal. Overall, the shelter is in good condition. Some of the stones in the piers have shifted slightly, and the shelter has a slight lean to the right. Some of the ends of the logs show some rot, but overall seem to be in excellent condition. The logs have been stained dark brown.

Mt. Langdon. Built 1936. BRT0034, Bartlett. Saco Ranger District. Contributing.

The shelter is located on the Mt. Langdon Trail, about 3 miles from the Mt. Langdon trailhead on Cobb Farm Road (Figure 25).

The shelter was completed in 1936, most likely by the Civilian Conservation Corps ("Updates" for 1936 map on "Map Correction Map" in WMNF Administrative Atlas No. 3). Mt. Langdon shelter closely follows the 1935 USFS plan "Forest Camp Adirondack Shelter" described above (Figure 20). The ends of the logs have beveled edges. The roof is overlapping sheets of corrugated metal. Foundation stones have worked loose, and the logs are in contact with the ground surface in places (Figure 26). The shelter roof, floor, and sill show serious rot from roof leak water damage, especially in the northeast corner (Figure 27). The privy is a small plywood structure with corrugated plastic roof located about 80m west of the shelter, and there is a stone fire ring in front of the shelter (Figure 28). The shelter is out of plumb due to the missing foundation stones, rot, and the root of a large beech tree south of shelter pushing up the left front (SE) corner (Figure 29).

"Plans for Appalachian Trail Lean-to" – 1939

This design (Figure 30) was issued by the Appalachian Trail Conference in 1939 and reissued multiple times into the 1950s (Appalachian Trail Conference 1939). The Appalachian Trial wished to capitalize on the presence of CCC crews working on federal lands the trail passed through, and desired to emulate the shelter systems of the White Mountains and Adirondacks along the length of the trail by providing a continuous chain of shelters no more than ten miles apart (Appalachian Trail Conference 1939 and 1949). The plan specifies that shelters should be located near a dependable source of drinking water, in an area with good drainage, and that a toilet and garbage pits should be provided near the shelter and so as not to contaminate the drinking water source. A stone fireplace in front of the shelter is described as necessary to reduce the fire hazard. The shelter itself is log, notched at all four corners with

a shed roof and large overhang with a narrow front opening to provide protection, and sleeping space for six people. The dimensions in the plan are 15'8" wide with an interior floor space 6'8" deep, and a 2'2" overhang, and 7'8" high at the ridge pole. The front of the shelter was partially enclosed with an 8' wide and 4'8" high opening, the bottom of which was to be hewed flat to provide a "Deacon Seat." (The term "Deacon Seat" comes from contemporary lumberjack lingo, referring to a split log bench along the front of the bunks in logging camp bunkhouses.) Desired roofing was composite or wood shingles. The interior of the shelter in the plan has a unique bunk design among White Mountain shelters, with 4-6 inch peeled poles spaced 30 inches apart running from the front to the back of the shelter, and covered with ½" wire mesh hardware cloth, rather than wood planking, to provide a sleeping surface elevated from ground level (Appalachian Trail Conference 1939). Although not on the Appalachian Trail, the Perkins Notch shelter is the only shelter on the WMNF known to have been built according to the early version of this plan. There may have been other shelters on the AT in the White Mountains of this design that have since been replaced, and a modified version was used by the DOC for AT shelters in the 1990s-2000s (see below).

Perkins Notch. Built 1957. BEP001, Beans Purchase. Androscoggin Ranger District. Non-Contributing.

The Perkins Notch shelter, located 7 miles from the Wild River Campground on the Wild River Trail south of No Ketchum Pond, was built in 1957 at the site of the former Perkins Notch Cabin, which stood from 1936-1955 (Figure 31; AMC 1948; Wheeler 1958: 130). The shelter was located in a poorly drained boggy area, exacerbated by beaver activity at the pond (Figure 32). There were plans in 1993 to relocate the shelter to higher and dryer ground nearby, but the plan was never implemented (WMNF CRRR#1993-03-21). In 2006, the area became part of the newly designated Wild River Wilderness Area, and this and two other shelters were viewed as detracting from the Wilderness character. (The other two shelters, Blue Brook and Spruce Brook, were not eligible for the NRHP.)

Perkins Notch shelter was less precisely built than shelters built elsewhere on the forest around the same time (see examples of "WMNF Adirondack Shelter- 1958" below), with logs unevenly sized in diameter, and notches not plumb (Figures 33 and 34). It was built on mortared fieldstone piers, with corrugated metal roofing. The logs were stained dark brown. Passing over the "deacon seat" at the entrance, the floor immediately inside dropped to a lower level, with a raised bunk about 2 feet back, in accord with the Appalachian Trail lean-to plans (Figures 30 and 34). This created a trough between the sleeping area and the entrance, purportedly to trap porcupines before they could reach sleeping campers (Appalachian Trail Conference 1939). At Perkins Notch, wood flooring was used in combination with the wire mesh specified in the plan. The shelter had a privy, dismantled c.2009.

The Perkins Notch shelter was documented on a New Hampshire Individual Inventory Form and determined individually eligible for listing in the National Register of Historic Places in 2008. The shelter was dismantled and removed in 2011 and no longer contributes to the Historic District. A Memorandum of Agreement with the New Hampshire State Historic Preservation Office (WMNF CRRR# 2007-02-03) was developed to resolve the adverse effect to the historic property caused by its removal, and the present thematic overview of the WMNF hiking shelter system serves as partial mitigation for the loss of the shelter.

Gabled, c.1940

Several shelters were constructed around 1940 by the AMC that were considered open shelters rather than enclosed cabins, but do not conform to the typical lean-to format. Instead, they were log structures with a gabled roof line, and an unenclosed opening or doorway in the gable end, often with a large overhang. There were variations in design, but they were generally built with flush logs rather than notched corners. There are no extant shelters of this type, though it has been confused with the later *Mahoosuc* style (see below). Examples were early iterations of Garfield Pond (1940, Figure 168), Great Gulf (1940), Guyot (1939, Figure 116), and Isolation (Figure 35).

Dartmouth Outing Club-Large Overhang

Eleven shelters were built by the Dartmouth Outing Club (DOC) in the 1930s, and nine more were built between 1955 and 1981, some as replacements of earlier shelters. (Hooke 1987: 108). The early DOC shelters were of a "modified AMC/Adirondack design" with walls of native spruce or fir, split-log floors with space underneath for firewood storage, and a tin roof with a low front overhang to facilitate snowdrifts at the opening of the shelter, thus providing additional warmth for winter camping (Hooke 1987: 108). Examples of this type included the Webster Cliff/Wachipauka Pond shelter (Figure 36), which had the most exaggerated overhang, first Beaver Brook shelter (see Figure 132), and Camp Misery, all since removed.

WMNF Adirondack Shelter- 1958

In 1958, the White Mountain National Forest developed a new "Adirondack Shelter" plan. (White Mountain National Forest design titled "Adirondack Shelter" dated April 19, 1958, Figure 37) It has horizontal logs, saddle-notched at all four corners, a partially enclosed front and a salt-box style roof with slight overhang in front. The plan specifies galvanized iron roofing and a stone pier foundation. A distinctive feature of the USFS shelters of this design is that the ends of the logs were shaped into wedges with 45-degree angle sides and vertically-aligned 1-inch wide flat points. Camp Penacook, built in 1957, may have been the prototype for this design. Three other existing shelters, all on the Saco Ranger District, are of this design: Flat Mountain Pond, Dry River No.3, and Sawyer Pond. Dry River No. 3 is in a Congressionally-designated Wilderness Area, and is unlikely to be maintained. They are all in similar condition, requiring or having recently received new roofs and replacement of rotting sill logs.

Camp Penacook. Built 1957. ALB0046, Albany. Saco Ranger District. Contributing.

The Camp Penacook shelter is located on a spur trail off the Piper Trail on Mt. Chocorua (Figure 38). At the time of its construction, Camp Penacook was located on a short spur trail on the north side of the Piper Trail, but the main trail has since been relocated and the shelter is now reached by a spur trail (about .2 miles long) on the south side of the trail, about 2.8 miles from the Piper Trail trailhead on Rt. 16 in Albany. The Piper Trail continues to be the most highly-used route to the popular hiking destination of Mt. Chocorua's summit.

The existing shelter, built in 1957, is the second Camp Penacook shelter. The first was built in 1916 by the Chocorua Mountain Club and served, along with the nearby Camp Upweekis shelter, as a camp site along the popular Piper Trail from Rt. 16 in the town of Albany, NH to the summit of Mt. Chocorua. The 1916 shelter was of the *Log Shed* style described above, with small attached storage shed (Appalachian Mountain Club 1922: 358; Figure 39). The 1957 supplement to the Appalachian

Mountain Club's White Mountain Guide describes both Camp Penacook and Camp Upweekis as being in poor condition (Appalachian Mountain Club 1957: 15). Camp Upweekis was removed and not replaced, and the current log Camp Penacook was built by the USFS in 1957 (Wheeler 1958: 130; Wheeler 1959: 431).

Camp Penacook has notched corners and a salt-box style roof (Figure 40). It was built according to the White Mountain National Forest design titled "Adirondack Shelter" dated April 19, 1958, described above (Figure 39). Unlike the 1958 plan and the other existing shelters of this style, the Camp Penacook shelter has no center vertical post (Figures 41-42). The shelter is oriented toward an expansive view of the valley below, and also provides a near-view of the summit of Mt. Chocorua. The shelter is in good overall condition. The ends of some of the logs have rotted away. The sill logs, which over time had come into contact with the ground surface as run-off caused sediment and leaf litter to build up against them, showed significant rot and were replaced in 2013 (WMNF CRRR# 2012-05-13). The metal roof was replaced in 2011. A wooden tent platform is located directly behind the shelter to accommodate additional campers. A stone fire ring is located in front of the shelter against a low slab of exposed granite ledge, and a small wooden outhouse is located approximately 75m east of the shelter (Figure 43).

Sawyer Pond. Built 1958. LVM0001, Livermore. Saco Ranger District. Contributing.

The Sawyer Pond shelter is located on the western shore of Sawyer Pond, in the unincorporated town of Livermore (Figure 44). The shelter is on the Sawyer Pond Trail, about one mile east of Sawyer River Road, and 4.5 miles from the trailhead on the Kancamagus Highway (Rt. 112). The Sawyer River Road is the location of the former Sawyer River Railroad, associated with the logging operation based around the mill in the now-abandoned town of Livermore, active from 1877-1928. A logging road may have extended from the railroad toward the pond, but the pond was not a focus of logging-era development (Gove 2001: 24).

A shelter at Sawyer Pond was considered as early as 1935, when it was noted in the WMNF Recreation Plan that "An Adirondack shelter is contemplated to be placed on a knoll commanding a good view of the pond." The 1936 map marks a "proposed" shelter at this location, but no shelter was constructed until 1958, when the existing shelter was built to promote fishing at the pond (Wheeler 1959: 430; Figure 45). Sawyer Pond shelter was built according to the White Mountain National Forest design described above titled "Adirondack Shelter" dated April 19, 1958, with notched corners, and a salt-box style roof (Figure 37; Figure 46). South of the shelter are six wooden tent platforms, probably built originally in the 1970s as part of the "Campsite Betterment Plan" to accommodate overflow campers from the shelter (Figure 47). Five of these were reconstructed in 2009-2010, and at the same time a new composting toilet was constructed. There are currently two outhouses to serve the shelter and campsites. The one closest to the shelter was replaced in 2004. In 2008, a standing seam metal roof was put on the shelter, and in 2011, rotten sill logs on the shelter were replaced in-kind (Saco Ranger District 2002-2011, Figure 48).

Dry River No.3. Built 1963. CTG0001, Cutts Grant. Saco Ranger District. Contributing.

Dry River No. 3 shelter is located on the Dry River Trail, approximately 1.5 miles north of the junction of the Dry River and Isolation Trails in the Dry River Wilderness (Figure 49 and Figure 50).

The Dry River Trail follows the general route of an old logging railroad, the Saco Valley Railroad, which was in operation from 1892-1898 (Belcher 1980).

The first Dry River No. 3 shelter was one of three shelters built along the Dry River Trail in the 1930s, most likely by the Civilian Conservation Corps, which was actively building trails and shelters in the area at that time (Civilian Conservation Corps 1937). The shelters do not appear on the 1934 WMNF map, but are present on the 1936 map. There is some variation in how the shelters are labeled on historic WMNF maps, with "Dry River No. 3" sometimes the southern-most of the three Dry River shelters, but most often the northern-most. The shelter currently known as Dry River No. 3 is the northern location, and this is also the No. 3 location on historic USGS maps. In the summer of 1963, the White Mountain National Forest rehabilitated the Dry River No. 3 shelter, airlifting supplies to the site (Wheeler 1963: 198). It is likely that this "rehabilitation" constituted complete reconstruction of the shelter, since the existing shelter closely conforms to the 1958 design described above that was in use on the WMNF at this time (See Figure 39). A 1967 photo shows the existing shelter in place (Figure 51). The other two Dry River shelters, Nos. 1 and 2, were removed and not replaced. Dry River No. 1, the southern-most of the three shelters, was removed in 1975 (AMC 1976: 91), and Dry River No. 2 was removed c.1980. Dry River No. 3 is in generally good condition (Figure 52), but is located within the Presidential-Dry River Wilderness Area, and will be considered for removal when major maintenance is necessary (WMNF 2008).

Flat Mountain Pond. Built 1964. WAT0002, Waterville Valley. Saco Ranger District. Contributing.

The Flat Mountain Pond Shelter is located at the south end of Flat Mountain Pond in the town of Waterville Valley on the Flat Mountain Pond Trail, 5.3 miles from Whiteface Intervale Rd. and 5 miles from Bennett Street trailhead in Sandwich (Figure 53).

The Flat Mountain Ponds remained a remote area in the town of Waterville Valley until the early 20th century, when it began to be accessed by hikers. In 1911-12, "A well-worn trail followed the shore completely around the Ponds, and at the Southeastern end of the upper pond, a rough lean-to by a good spring afforded overnight shelter" (Wright 1936: 117; Figure 54). In 1917, the Beebe River Railroad was built to the ponds by the Parker-Young Company to harvest timber from the area, and the hiking shelter was removed. Logging camps were constructed around the ponds. The Flat Mountain fire in July 1923 destroyed much of the timber value of the area. The Draper Corporation bought the operation in 1924 and continued to log for bobbin manufacture until 1942, when the rails were removed for scrap during World War II, and the railroad right-of-way began to be used by hikers, hunters, and fishermen (Belcher 1980: 226-234). Buildings from the abandoned logging camps at Flat Mountain Pond continued to be used by hikers and fishermen until c.1960. A cabin in the vicinity of the existing shelter, at Beebe River Logging Camp 10, was described on a Forest Service photo in 1960 as "At foot of Flat Mtn Pond, about 18' x 22'. Sleeps 6. Good camp. Very old" (Copy of photo in WMNF Site 5-404 file). Around 1960, New Hampshire Fish and Wildlife built a dam at the southern end of the lower Flat Mountain Pond, changing the shape of the pond and merging it with the upper pond. The existing shelter (Figure 55) was built by the USFS in 1964 (Wheeler 1965: 774). The Camp 10 cabin was probably removed about this time.

Flat Mountain Pond shelter was built according to the White Mountain National Forest design titled "Adirondack Shelter" dated April 19, 1958 described above (see Figure 39), with notched corners, and a salt-box style roof (Figure 56). The shelter is in fairly good overall condition; however, the

front right door post has been burned slightly. The rear sill log, which over time had come into contact with the ground surface as run-off caused sediment and leaf litter to build up against it, showed signs of rot and was replaced in 2012 (WMNF CRRR# 2012-05-14). A small composting toilet building, installed in 2001, is located approximately 25m southwest of the shelter (Figure 57).

AMC Vertical Pole

The Appalachian Mountain Club developed a new shelter design in 1957 with the Ethan Pond shelter (Roenke's Style 5). In addition to the Ethan Pond shelter, a shelter in Great Gulf (1959) and Eliza Brook shelter (1963) were also of this design. Of these, only Ethan Pond is still standing in 2015. The shelter design was by Frank Von Hippel, AMC trail master. According to the AMC Councillor of Trails, Ethan Pond represented "a new concept in construction, differing from the regular A.M.C. pattern. Vertically stockaded, peeled spruce logs form the side-walls; it has the usual open front, and is salt-box in shape" (Maker 1957: 537-8.) This design was further refined in 1959 for the new Great Gulf shelter. Space under the shelter was left open for ventilation, the floor was pitched from the back to the front at a slope of about 1 inch in 4 feet for "drainage and more comfortable sleeping" (Goodhue 1959: 566). Spruce was used for load bearing members, with fir for stockading. The finish stain recommended by USFS Forest Products laboratory consisted of boiled linseed oil, paraffin, turpentine, coloring matter, penta-chlorophenol for preservative and fungicide (Goodhue 1959: 566). The AMC Councillor of trails at the time felt the club had finally perfected its shelter design:

> All the experience gained through the construction and maintenance of the twenty-one other shelters built for public use by the Club has been incorporated into the design of this new one. There are several novel and noteworthy features. One of the more important is the vertical-log walls, or stockading. Some of the superior virtues of this type of construction are that the logs are more resistant to rot and that it is possible to use logs of much smaller diameter. A great advantage, as far as ease and rapidity of construction are concerned, is that the side-walls can be prefabricated in horizontal position and then hinged up into the vertical one. There are only sixteen notched joints to cut and fit, which practically eliminates a tricky and onerous job, as well as reducing the number of weak points and of places for potential moisture pockets which would result in rot. The few notched joints are strategically located to lock the shelter together into a very rigid and wrack-proof structure… We feel that we now have a "standard shelter" incorporating many excellent practical features. It is a very attractive structure architecturally, and future shelter construction and reconstruction should follow this pattern closely. (Goodhue 1959: 565-567)

The AMC's enthusiasm for this design was not long-lived, however. After Eliza Brook in 1963, the AMC abandoned this design.

Ethan Pond. Built 1957. BET0021, Bethlehem. Pemigewasset Ranger District. Contributing.

The Ethan Pond shelter is located 2.8 miles from US Rt 302 on the Ethan Pond Trail, part of the Appalachian Trail. There is a short (approximately .14 mile) spur trail leading north from the Ethan Pond/Appalachian Trail to the shelter site (Figure 58). The shelter is about 87m east of Ethan Pond, with no view of the pond.

The shelter was built in 1957 by the Appalachian Mountain Club (Maker 1957: 537-8; New Hampshire Sunday News, 8/4/1957). The original 1957 shelter, the first at the site, still stands and was the 19th AMC shelter in the White Mountains at the time it was built. As described by the AMC when newly built by their trail crew, the Ethan Pond shelter "represents a new concept in construction, differing from the regular A.M.C. pattern. Vertically stockaded, peeled spruce logs form the side-walls; it has the usual open front, and is salt-box in shape. It has been treated with

creosote and has a steel roof… Accommodation is for ten persons. The area is provided with a fireplace, covered refuse pit, and toilet" (Maker 1957: 537-8). The Ethan Pond shelter is unique in its exclusive use of vertical logs in the side walls (Figure 59), the only remaining shelter of this design in the White Mountains since the replacement of the similar Eliza Brook shelter (built 1963) with a new shelter in 2010. It represents a stylistic departure from the more traditional horizontal log construction, and relies on nails rather than notched logs. The shelter is in fairly good condition—the front left corner post, sitting on a stacked fieldstone pier about 1.5 feet high, has shifted slightly from vertical (Figure 60), and some of the vertical logs in the back wall of the shelter have shifted, tilting outward. The AMC plans to bring the shelter back into alignment and install log bracing in the summer of 2015 (WMNF CRRR# 2015-04-03). A hole in the floor boards near the front of the shelter appears to be the result of an attempted indoor campfire. The gaps between the poles were originally chinked with oakum, but there is little remaining. The metal roof appears to be the original. In the northeast corner, the corner post and part of the north sill log are square hewn, rather than round unhewn logs like the rest of the structure. This is not the case in the southeast corner, and may be a repair/replacement of damaged or rotten logs, though there is no record of this.

The area around the shelter includes six wooden tent platforms, a composting toilet/privy, a dishwashing area with stone lined drainage ditches and metal bear-proof food storage chests, and an interconnecting system of stone-lined paths and camp sites (Figure 61). The site, located on the Appalachian Trail, sees heavy use. In the summer months, there is an AMC caretaker on site, and the site has more postings and precautions in place than the average shelter site for protection of vegetation and food storage to avoid wildlife conflicts.

Mid-20th Century-Move to Dimensional Lumber Shelters

By the late 1950s and 1960s, the Forest Service was aggressively building new shelters. Forest Supervisor Gerry Wheeler stated in 1964 that "We [the WMNF] plan on building two or three new shelters each year, as well as rehabilitating some of the older ones" (Wheeler 1964: 191). The Forest Service developed several designs, which were also used by the AMC. The shelter designs of this period moved away from log construction in preference of dimensional lumber for "greater efficiency of labor and lower cost," since shelters could be prefabricated and then airlifted to the site for assembly (AMC Trail Crew 1968: 335). The variations of this type of shelter, described in detail below, tend to have poured concrete piers rather than a stone foundation, and originally had asphalt shingle roofing. They are all stained or painted brown. These lean-tos tend to be larger than log lean-tos, as local tree lengths were no longer a limiting factor. The WMNF plan for a "24 Ft Adirondack Shelter, 8-Man," described below, noted that the length of the shelter could be increased to 32 feet by adding one more 8' section of duplicate framing.

"24 Ft Adirondack Shelter, 8-Man"-1965 (FS Drawing No. 7300-60050)

This plan for a framed shelter built with dimensional lumber, developed by the Forest Service and dated 1/25/1965, retains the traditional saltbox shape, with two central square post columns dividing the shelter into three bays (Figure 62). The front of the shelter is open except for short 2 ½ ft wide walls on each side of the opening, with an overhanging roof in the front. Siding used on this style of shelter is horizontal 1" x 8" clapboards, sometimes with a straight edge, sometimes with a "live edge." Surviving examples of this style, Roenke's Style 7, include Three Ponds shelter, Rocky Branch No. 1, Rocky Branch No. 2, and Hermit Lake shelters 1-5.

Hermit Lake Shelters 1-5. Built 1965-1967. SGP0002, Sargents Purchase. Androscoggin Ranger District. Contributing.

The Hermit Lake complex of shelters is located at the base of Tuckerman Ravine on the eastern side of Mount Washington. There are currently eight shelters and three tent platforms located around Hermit Lake, 2.4 miles via the Tuckerman Ravine Trail from the AMC Pinkham Notch Visitor Center on Rt. 16 (Figure 63). Shelter Nos. 1-5 are located around Hermit Lake on its north, east, and southern sides, accessed by a spur trail branching northeast from the Tuckerman Ravine Trail and curving west around the lake. The tent platforms are west of the lake.

Tuckerman Ravine has long been a destination for hikers and tourists to the Mount Washington Valley. The first shelter at Hermit Lake was built in 1879 (Waterman 1989: 208.) The AMC maintained a bark shelter at Hermit Lake (Figure 64) until the USFS built a new log shelter of the "Forest Service Vertical and Horizontal Log" style described above in 1921 (AMC 1925: 182; Fritz 1922; Figure 5). This shelter came to be known as "Hermit Lake A," and was joined by "Hermit Lake B," built on the edge of Hermit Lake with all horizontal logs in 1929 (Figure 65; Hale 1929 correspondence). In the 1948 AMC White Mountain Guide the locations of the two shelters, now referred to as Hermit Lake No. 1 and No. 2, are described: "Shelter No. 1 is located near the junction of Tuckerman and Lion Head trails. Shelter No. 2 is on the NW shore of the Lake" (AMC 1948: 175). To accommodate the increasing numbers of hikers and skiers visiting the area, a new facility was built in 1953 by the USFS "to the left of the Fire Trail, just east and below the new ski shelter…The new three-sided structure is built in the shape of a wide-angled "U" and faces east or downhill. It is open at the front and will sleep sixty persons. Nearby is an enclosed structure that will be used for cooking purposes." (Belcher 1953; Belcher 1954). The USFS and AMC negotiated the terms of joint operation for this new facility, which came to be known as "The Cowshed." In 1960, Hermit Lake Shelters A and B were determined to be beyond repair, and were subsequently removed (Figure 66; Wheeler 1960 correspondence; AMC 1966: 12). Around 1965, the WMNF began to build new shelters around the lake, following the 1965 USFS "24 Ft Adirondack Shelter, 8-Man" design described above (Figure 62). The exact date when each of the five shelters of this design was built is difficult to determine, though references indicate that they were constructed between 1965 and 1967. The 1966 White Mountain Guide states that "four new Adirondack-type shelters circling the lake will accommodate…forty persons." (AMC 1966: 12) These are likely the shelters numbered 1-4. The U-shaped 60 person shelter, which presented management difficulties due to its large size and party atmosphere (another nickname was reportedly "The Opium Den"), was torn down in 1967, and three new lean-to shelters were built, including Hermit Lake No. 5 (Figure 67; Goodrich 1968: 141; Godden 2010). Today there are eight shelters in the Hermit Lake complex operated under permit by the AMC; five in this style, and three in the *USFS "Adirondack Shelter, 10-12 Man" (FS Drawing No. 7300-60131)* style described below. Additional buildings in the complex include the skier information and caretaker hut, the USFS Snow Ranger's cabin, the volunteer ski patrol cabin, a flush toilet building, and several composting toilets (Figure 68). In addition to their contribution to the significance of the White Mountain National Forest Hiking Shelter System Historic District, the Hermit Lake shelters likely contribute to the historic significance of the Hermit Lake area complex, but evaluation of the entire area is beyond the scope of the current survey.

Hermit Lake No. 1. Built 1965-1966. Shelter No. 1 (Figure 69) is located on the northwest side of Hermit Lake, directly north of the caretaker's hut. It adheres closely to the 1965 plan. It has square post columns, sits on fieldstone piers, and has brown live-edge siding. A wooden shelf runs along the back wall on the interior. It has a newer floor and metal roof.
Hermit Lake No. 2. Built 1965-1966. Shelter No. 2 (Figure 70, Figure 71) is east of Shelter No.1, and is essentially the same, with the exception of round log posts, rather than square posts.
Hermit Lake No. 3. Built 1965-1966. Shelter No.3 (Figure 72) is southeast of Shelter No. 2 on the northeast side of Hermit Lake, and has square post columns, sits on fieldstone piers, and has brown straight-edge siding and a metal roof.
Hermit Lake No. 4. Built 1965-1966. Shelter No.4 (Figure 73) is southeast of Shelter No. 3 and east of Hermit Lake, about midway between the lake and the Lion Head Trail. It has square post columns, brown straight-edge siding and a metal roof. It originally had fieldstone piers, some of which have been coated with cement, and some replaced by poured cement columns in the 1980s. It has a newer floor, accessed by three sets (one at each bay) of wooden stairs (5 steps each).
Hermit Lake No. 5. Built 1967. Shelter No. 5 (Figure 74; see also Figure 67) is on the south side of Hermit Lake, about midway between the lake and the Tuckerman Ravine Trail. It has two round log columns, and two square post columns. The front columns have angle braces, probably added in the 1980s, from the bottom of the posts to the front of the roof overhang. It sits on fieldstone piers, and has brown straight-edge siding. It has a newer floor and metal roof.

Rocky Branch No.1. Built 1974. JAC0007, Jackson. Saco Ranger District. Non-contributing.

The Rocky Branch No.1 shelter is located near the junction of the Rocky Branch and Stairs Col Trails, just outside the Presidential Range-Dry River Wilderness, about 2 miles on the Rocky Branch Trail from Jericho Rd. The shelter is located on a short spur path 60 yards east of the Rocky Branch Trail (Figure 75).

The Rocky Branch Trail is located on the bed of the former Rocky Branch logging railroad line (1908-1914). The area where the shelter sits is the location of a logging camp known as "The Storehouse." (1916 AMC map; Gove 2001.) "The Storehouse" is described as a small settlement built in 1908 with a large camp building, a company store, storage house, and railroad sidings, with an engine house, water tank, and ash pit ½ mile below. Another large logging camp known as Jonesville was a short distance above the Storehouse, with a "pest-house" for smallpox victims. (Gove 2001: 108-111).

The first indication of a shelter at the location of Rocky Branch No. 1 is on the 1936 WMNF map (there is no shelter on the 1934 map). The CCC was actively building trails and shelters in the area during the mid-1930s. (Civilian Conservation Corps 1937) In keeping with known CCC shelter styles, it was likely a log shelter. The early Rocky Branch No. 1 shelter was replaced in 1974 (the date is taken from the plaque on the shelter) with a new shelter that conforms to the 1965 WMNF plan for "24 ft Adirondack Shelter 8-Man" (Figure 62).

Rocky Branch No.1 shelter is in excellent overall condition (Figure 76). It sits on 16 poured concrete columns and has 1"x8" inch straight edged siding. The asphalt shingle roof was replaced in 2010. The site includes a metal fire ring, an outhouse south of the shelter, and five wooden tent platforms southeast of the shelter toward the Rocky Branch River (Figure 77).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Rocky Branch No.2. Built c.1967. SBP0004, Sargents Purchase. Saco Ranger District. Non-contributing.

The Rocky Branch No. 2 shelter is located on the Rocky Branch Trail, 60 yds south of junction with Isolation Trail. The shelter is approximately 3.7 miles west of Rt 16, and 6 miles north of the end of Jericho Rd (Figure 78). The shelter sits at the top of the slope about 30m west of the Rocky Branch River in a small clearing, and the Rocky Branch Trail passes along the west end of the shelter (Figure 79). The Rocky Branch Trail is located on the bed of the former Rocky Branch logging railroad line (1908-1914). The area where the shelter is located is called Engine Hill, because of the steep grade, and was the site of several train derailments. (Gove 2001: 113, 119-120) Logging camps were located along the rail line, with the Jim Monahan camp north of the shelter location, and Cumming's camp to the south. The Rocky Branch watershed was the location of several severe forest fires as a result of logging activity, and the rails were removed in 1914. (Gove 2001: 121-122) The existing shelter is likely a replacement of an earlier shelter, as there was a shelter present at this location beginning in 1936 (Historic WMNF maps).

The Rocky Branch No. 2 shelter is dated to c.1967, primarily by style and materials (Figure 80). The first indication of a shelter at the location of Rocky Branch 2 is on the 1936 WMNF map (there is no shelter on the 1934 map). The CCC was actively building trails and shelters in the area during the mid-1930s. (Civilian Conservation Corps 1937) In keeping with known CCC shelter styles, it was likely a log shelter. The early Rocky Branch No. 2 shelter was replaced after 1965 with a new shelter that conforms to the 1965 WMNF plan for "24 ft Adirondack Shelter 8-Man" (Figure 62). Additional evidence for the date of the shelter's construction comes from the graffiti on the building. The earliest graffiti dates to 1967, with abundant dates from the 1970s and later.

Of the eight shelters on the forest of this design, Rocky Branch No. 2 is in the worst condition (Figure 81). There are large holes in the roof, missing shingles, and missing clapboards. Rocky Branch No. 2 has straight edge siding, and sits on fieldstone piers rather than the poured concrete more typical of this style. The wood and shingles of the shelter are very weathered and deteriorating. The shelter is located in a federally designated Wilderness Area and surrounded by rugged terrain, making repair and maintenance work difficult. In 2015, it is proposed to dismantle and remove the structure and naturalize the site. Permanent structures are generally considered to be inconsistent with Wilderness management objectives, and removing the structure, which requires extensive repairs, would help restore the area's wild character. Three new tent sites on the opposite side of the trail would replace the shelter. The New Hampshire State Historic Preservation Office concurred that removal of the shelter would have "No Effect" on any property eligible for the National Register of Historic Places (See WMNF CRRR# 2014-05-01; New Hampshire Division of Historical Resources RPR# 5511).

Three Ponds. Built c.1966. WRN0005, Warren. Pemigewasset Ranger District. Contributing.

The Three Ponds shelter is located in a small clearing on a knoll on the east side of the middle pond on the Three Ponds Trail, 2.3 miles from the trailhead on Stinson Lake Road. A side path diverges

east to the shelter (Figure 82). The Three Ponds Trail is an old logging road, and the shelter site may be an old logging camp clearing (AMC 1948: 400).

The shelter was built c.1966-1967. It is not listed in the 1966 AMC Guide, but first appears on the 1967 WMNF map. The shelter closely adheres to the 1965 plan for 24ft Adirondack Shelter-8 man (Figure 62), though it appears to originally have had a wood shake roof (Figure 83) that has since been replaced with asphalt shingles. The siding on the front walls either side of the opening has been stripped off (Figure 84). The shelter sits on cast concrete piers, and is stained brown (Figure 85). There are two concrete fireplaces in front of the shelter, with a fieldstone fire ring built in between them (Figure 86). The concrete fire places are unusual, and may be remnants of earlier logging camp structures.

USFS 16' Appalachian Trail

A shorter 2-bay version (16 feet long rather than 24 feet) of the frame shelter plan described above ("24 Ft Adirondack Shelter, 8-Man"-1965) was used for the Rattle River and Trapper John shelters on the Appalachian Trail. This style was commonly used on southern National Forests (there are at least fifteen on the AT in the George Washington and Jefferson National Forests in Virginia) and other locations along the Appalachian Trail corridor (there are examples in both Maine and Vermont) during the 1960s and 1970s (Appalachian Trail Conference 1962a, 1962b).

Rattle River. Built 1963. SHE0003, Shelburne. Androscoggin Ranger District. Contributing.

The Rattle River shelter is located in a small opening on the Rattle River Trail, part of the Appalachian Trail, about 1.5 miles south of US Route 2, and 25 meters east of the Rattle River (Figure 87). The trail passes along the west end of the shelter. There is a stone fire ring in front of the shelter, a composting toilet, and a three tent sites southeast of the shelter (Figure 88). The shelter was built by the USFS in 1963 (Wheeler 1964: 190-191). It sits on a low mortared fieldstone foundation, has brown straight-edge siding, square columns, and an asphalt shingle roof (Figure 89 and Figure 90).

Trapper John. Built 1973. LME0007, Lyme. Pemigewasset Ranger District. Non-Contributing.

The Trapper John shelter is located on the Holt's Ledge Trail, part of the Appalachian Trail, 0.8 miles from the Lyme-Dorchester Road, accessed by a 0.3 mile side path to the west (Figure 91).

The shelter, named by the Dartmouth students that built it after the fictional character from the MASH television series and books who had Dartmouth and DOC connections, was built in 1973 by the Dartmouth Outing Club on the site of the Holt's Ledge Cabin, which stood from 1922-1958 (Hooke 1987: 103-104, 135-136). The existing shelter sits on the foundation of the cabin, with the cabin's stone fireplace and chimney standing across from the shelter at the opposite end of the foundation (Figure 92). Between the shelter and the chimney are two fire rings, one of fieldstone with a metal grate, and one metal fire ring. About 10m east of the chimney, the shelter access trail runs along the edge of a slumped stone lined cellar hole, most likely the remains of the 19th century "J.P. Dimick" farm (Walling 1860). Stone walls and an abandoned road are also associated with the historic farm site. The area where the Dimick barn was likely located appears to have been used as the Holt's Ledge Cabin trash dump, with metal bed frames and cast iron stove parts visible on the surface (Figure 93). The Dimick farm was recorded separately as a WMNF archaeological site.

The shelter sits on twelve poured concrete piers connected by rebar, and has a corrugated metal roof (Figure 94 and Figure 95). A composting toilet is behind the shelter, about 50m to the north.

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. When the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

USFS "Adirondack Shelter, Five Man" (FS Drawing No 7300-60059)

A second plan from this period, for an "Adirondack Shelter, Five Man," (Figure 96) has a large roof overhang in front, and vertical tongue and groove siding. This style includes a separate firewood storage area under the roof along the back of the shelter (see Figure 99). This style was used at Spruce Brook shelter (built 1964 and removed 2009, Figure 97) and South Baldface shelter, though in both cases the spaces between the front angle braces supporting the roof overhang and the front posts were covered with siding, while in the plan this space is left open.

South Baldface. Built 1966. CHT0003, Chatham. Saco Ranger District. Contributing.

South Baldface shelter is located on the Baldface Circle Trail, 2.3 miles from the parking area on Rt. 113, and 1.4 miles up the south fork of the trail from where the trail branches at Emerald Pool (Figure 98). The trail runs around the north and west sides of the shelter (Figure 99).

The existing shelter (Figure 100) was constructed in 1966 (White Mountain National Forest 1966: 5). It is a replacement of a log shelter built by the CCC around 1936 (Figure 101) after the "USFS Plan for Forest Camp Adirondack Shelter-1935" plan described above. A shelter was "contemplated" in this location in the 1935 WMNF Recreation Plan, and first appears on the 1936 WMNF map. The original log shelter burned down in the spring of 1940, according to correspondence in USFS files. It was not immediately replaced. In deciding whether to replace the shelter, the WMNF contacted the AMC, who replied that the shelter was never very popular with AMC members, and they had no interest in it being rebuilt. By the 1960s, however, the WMNF was experiencing an increase in recreation use, and was actively building new shelters.

The shelter is constructed of dimensional stock lumber, with an asphalt shingle roof (replaced 2008), and was built on fieldstone piers, though the northeastern corner stones have been supplemented with wooden cribbing (Figure 102 and Figure 103). In 2013, rotten double 2x10" joists on the south side of the shelter were replaced in-kind, and the stone piers reconstructed. There is a stone fire ring in front of the northern end of the shelter opening. A composting toilet structure was installed in 2001 and is located about 40m southwest of the shelter. A tent site is located about 100m north of the shelter (Figure 104). The South Baldface shelter is the only remaining example of this style since the removal of Spruce Brook in 2009.

USFS "Adirondack Shelter, 10-12 Man" (FS Drawing No. 7300-60131)

A larger version of the "Adirondack Shelter, Five Man" style described above, intended to accommodate 10-12 people, was used for Hermit Lake shelter numbers 6, 7, and 8 (Figure 105), and the 1966 Kinsman Pond shelter (replaced in 2007). Unlike the five-man version of this design built at Spruce Brook and South Baldface shelters, on these larger shelters the space on

the sides of the overhang was left open, adhering to the design drawings. All have covered firewood storage space along the back of the shelter. These three shelters, located southeast of Hermit Lake at the base of Tuckerman Ravine, were also provided with sliding doors and an enclosed front opening to keep out snow, probably well after they were built, as doors are not included on the plan and were not part of the original construction (see Figure 108).

Hermit Lake Shelters 6-8. Built 1967-1969. SGP0002, Sargents Purchase. Androscoggin Ranger District. Contributing.

Historical background for the Hermit Lake shelters is provided above for Hermit Lake Shelter Nos. 1-5 of the "24 Ft Adirondack Shelter, 8-Man (1965)" style. The transition between Hermit Lake shelter styles occurred in 1967, when the two designs were used concurrently for Hermit Lake No. 5 and Hermit Lake No. 6, with the larger style favored for subsequent shelters at the site. Hermit Lake Shelter Nos. 6-8 are located south of Hermit Lake on the south side of the Tuckerman Ravine Trail, accessed by a parallel spur trail extending east from the caretaker's hut (see Figure 63 and Figure 68).

Hermit Lake No. 6. Built 1967. Shelter No. 6 (Figure 106 and Figure 107) is located directly south of Hermit Lake, and east of the caretakers hut and toilet buildings in the former location of the large U-shaped 60-person shelter built in 1953 and removed in 1967 (Goodrich 1968: 141). There is an open grassy area in front of the shelter. The trail leading east to Shelter Nos. 7 and 8 and west to the caretaker shelter and Tuckerman Ravine, runs along the south side of the shelter. Shelter No. 6 adheres closely to the design drawing (Figure 105), except that it sits on fieldstone piers rather than concrete, and has a metal roof rather than asphalt shingles. The open front has been enclosed with four fixed plywood panels in the center, and sliding panels at each end. In the 1968 photo of the shelter, the front is unenclosed (Figure 108). Each panel has a small rectangular fixed-pane window. The floor decking has been recently replaced.

Hermit Lake No. 7. Built 1968-1969. Shelter No. 7 (Figure 109) is located east of No.6, southeast of Hermit Lake, south of the Tuckerman Ravine Trail. The design calls for an overhang extending 3'6" from the front of the shelter, but at Shelter No. 7 the original overhang has been removed, probably within the past 10-12 years, and replaced with a shorter overhang extending about 2 feet. The shelter sits on poured concrete columns, has a metal roof, and the front has been enclosed with plywood panels and sliding doors, as at Hermit Lake No. 6.

Hermit Lake No. 8. Built 1968-1969. Shelter No. 8 (Figure 110) is the easternmost shelter in the complex, at the end of the spur trail extending from the caretaker's hut. It is identical to shelter No.6, except that it sits on poured concrete columns rather than fieldstone piers and appears to have its original floor.

Mahoosuc

The Forest Service continued to use the plans it developed in the 1960s into the 1970s, but the AMC began to replace aging lean-tos with "Alaskan trapper" log cabin-style shelters with an unenclosed doorway on the gable side, and often a front porch. This style became known as the "Mahoosuc" style, as the AMC used it in the replacement of several shelters in the Mahoosuc range along the Appalachian Trail in Maine in the early 1970s (such as Carlo Col) before using it for shelters on the WMNF. A few earlier non-extant shelters had an open-front gable shape and have been labeled "Mahoosuc," as described above as the "Gabled, c.1940" style (Roenke's Style 6), but the term was not in use until the 1970s and 1980s, when it became the favored style for replacements by the AMC. Mahoosuc shelters have a larger capacity than the typical lean-to, with two levels of sleeping platforms inside. This style saw a move away from dimensional lumber and a return to native materials, which were again recognized for their comparative longevity and lower cost (Rajala 1977). Existing examples of this style include Gentian (1974), Guyot (1977), Imp (1980), and RMC's Log Cabin (1985).

Gentian Pond. SUC0001, Success. Built 1974. Androscoggin Ranger District. Non-contributing.

The Gentian Pond shelter is located on the Mahoosuc Trail, part of the Appalachian Trail, on the northeast side of Gentian Pond, approximately 3.5 miles north of North Road near the intersection of Austin Brook and Mahoosuc Trails. The shelter is reached by a 0.2 mile spur trail (Figure 111). The first Gentian Pond shelter was built by the AMC in the early 1920s, and was of the Small-Log Saltbox style described above (Figure 112). The existing shelter was built in 1974 (Appalachian Trail Conference 1992: 68). It is a gabled log cabin with notched corners. Inside, across the rear half of the cabin is a sleeping loft. The shelter can accommodate 14 people. The roof was replaced in September 2000 and is red cedar. In 2011 and 2012, the AMC raised the shelter off the ground on 8 inch square log posts to provide airflow under the floor, constructed a ladder for access, installed a post to support the center of the front log of the loft, and replaced four sill logs and the floor of the shelter (Figure 113; Manikian 2011, 2012).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Guyot. Built 1977. LIN0006, Lincoln. Pemigewasset Ranger District. Non-contributing.

The Guyot shelter is located on a spur path from the Bondcliff Trail, about halfway between the summits of Mount Bond and Mount Guyot (Figure 114).

The original Guyot shelter was built by the AMC in 1913, and was in the *Log Shed* style described above (Tyler 1914: 208; AMC 1922: 301; Figure 115). In 1939, the AMC replaced the original shelter with a log shelter of the *Gabled* style described above (Hutton 1939b: 560, Figure 116). This shelter was built into the slope, which "meant a heavy cut-and-fill job, with a gravity stone wall for facing to support the front of the building" (Hutton 1939b: 560). The 1913 shelter was "without much to offer in the way of views," but the new shelter had "a broad vista sweeping across the Pemigewasset wilderness and the northern Presidentials in an unbroken panorama" (Hutton 1939b: 561). This shelter was replaced in 1977 by the AMC with the existing log shelter, built on the 1939 stone foundation. Unlike the 1939 shelter, the 1977 shelter was built with notched corners (Figure 117). It has a covered porch, accessed by a log ladder at the north end, and an asphalt shingle roof (Figure 118). There is a lofted sleeping platform inside, accommodating 12-14 people.

The original access trail to the shelter from the Bondcliff Trail approached the shelter from the southwest. Around 1972, the existing approach from the northeast side of the cabin was built and the earlier route abandoned. By this time, there were multiple tent platforms north and east of the shelter (AMC Guyot Campsite map 1973). There are currently six tent platforms and a caretaker's tent platform (Figure 118a).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Imp. Built 1980. BEP0003, Beans Purchase. Androscoggin Ranger District. Non-contributing.

The Imp shelter is located on a 0.2 mile spur path of the Carter-Moriah Trail, part of the Appalachian Trail, 6.6 miles from the trailhead on Bangor Street in Gorham (Figure 119).

There have been more versions of the Imp shelter than perhaps any other shelter in the system. The first shelter was built in 1885 in the *Birch Bark* style described above. This was replaced in 1906 by another bark shelter in a slightly different location (Blood 1939: 427; see Figure 2). In 1920, a cabin left from logging operations became the Imp shelter (Figure 120), and the bark shelter was torn down. The cabin was torn down in 1927, and the logs were used to build a new shelter. This was deteriorating by 1935, and the AMC built a new shelter in 1938 on the northeast side of the mountain. This was a framed, gabled building, with windows and a door. The sills, joists, studs, and rafters were hewed on site, and 6000lbs of additional materials were packed into the site. It was clad with creosoted wood shingles and rolled roofing paper (Blood 1939: 427, Figure 121). By 1979, the shelter was overcrowded, and the area around the site was damaged from overuse. It was removed, and in 1980 a new shelter (Figure 122) of native balsam fir logs in the Mahoosuc style was constructed slightly above the 1938 site (Rankin 1981; Figure 123).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Log Cabin. Built 1985. LBG0002, Low & Burbanks. Androscoggin Ranger District. Noncontributing.

The Log Cabin shelter is located on Lowe's Path, 2.5 miles from US Rt. 2 (Figure 124).

The site of the Log Cabin is likely to be the earliest permanent shelter site in the White Mountains. The original shelter at the site was a bark shelter built in 1876 by AMC trail blazers Dr. W.G. Nowell and Charles E. Lowe as they were cutting Lowe's Path. This first structure was known variously as the AMC Camp, Mt. Adams' Camp, or Lowe's Camp, and was maintained at this location for the next dozen years until it burned in 1887 or 1888. Nowell reported to the AMC in 1888 that a replacement camp with dimensions of 4 by 6 meters, facing SW, had been framed, and would be finished during the summer of 1889 as a "closed camp, logged up on all sides, roofed with cedar shingles painted red," (Figure 125). The Log Cabin served as Nowell's private camp over the next 25 or 30 summers. The cabin was overhauled in 1923, and replaced in 1985 by the Randolph Mountain Club with the existing Mahoosuc style building (Figure 126), dedicated to John H. Boothman, Jr., for many years a Randolph resident, trapper, guide and hotel owner (Hudson 2010: 5,16-18).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Kinsman Pond. Built 2007. LIN0005, Lincoln. Pemigewasset Ranger District. Non-contributing.

The Kinsman Pond shelter is located on the east side of Kinsman Pond on the Kinsman Pond Trail, about 0.1 mile south of "Kinsman Junction," where Kinsman Pond Trail meets the Kinsman Ridge and Fishin' Jimmy Trails, which are part of the Appalachian Trail (Figure 127).

The first Kinsman Pond shelter was built by the AMC in 1921 (Appalachian Mountain Club 1925: 405). The original shelter was in the Small Log Saltbox style described above (Figure 128). It was replaced in 1966 (Figure 129) with a version of the *USFS "Adirondack Shelter, 10-12 Man" (FS Drawing No. 7300-60131)* style described above (see Figure 105.) By 2007, this shelter had rotten sills and was sagging, and the AMC opted to replace it (Figure 130). According to AMC Backcountry Management Specialist Hawk Metheny, who oversaw the Kinsman replacement project, "The structure is very similar to Imp, which has received the most favorable comments from the public due to its craftsmanship and rustic appearance" (Durso 2009). The shelter was constructed off-site by The Wooden House Company founder John Nininger, who was an AMC trail crew member in the 1970s. The shelter accommodates 16, and "includes durable, weather-resistant materials: the white pine logs are treated with a wood preservative; the porch is crafted with cedar, a fairly rot-resistant wood; and the roof's red cedar shingles lie atop an impermeable ice and water shield" (Durso 2009).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Shelter Design post-1990

Only one shelter was constructed in the 1990s. Since 1990, the DOC has replaced three shelters, and since 2007, the AMC has replaced three shelters. These more recent replacements tend to be log, and are often throwbacks to older styles. The DOC began using an update of the *"Plans for Appalachian Trail Lean-to – 1939"* style. The new Eliza Brook shelter, built in 2010, is very similar to the 1935 "*USFS Plan for Forest Camp Adirondack Shelter*." The Kinsman Pond shelter, built in 2007, is in the 1970s *Mahoosuc* style, and is described above under that heading. The AMC now uses prefabricated log shelters, individually designed and airlifted in pieces to be assembled at the shelter location. Metal roofs are favored for new shelters and as replacement roofing for older shelters. The Forest Service has not constructed any shelters of its own since the 1970s, though it approves the designs submitted by the trail clubs for shelters they maintain on National Forest lands.

DOC Modified Appalachian Trail Lean-to

In the 1990s and 2000s, the Dartmouth Outing Club used a variation on the original *"Plans for Appalachian Trail Lean-to – 1939"* style described above (see Figure 30) for several shelters along the section of the Appalachian Trail west of the WMNF that they maintain. The size and proportions of the new shelters is similar to the 1939 plan, but like the older DOC style described above, the corners are not notched. Instead, they are attached to the vertical corner posts with metal spikes. Triangular benches are provided on the front of the shelters on each side of the opening. The shelters have metal roofs, and composting toilets are provided nearby.

Beaver Brook. Built 1993. BEN0005, Benton. Pemigewasset Ranger District. Non-contributing.

Beaver Brook is located on a short spur trail north of the Beaver Brook Trail, part of the Appalachian Trail, 1.5 miles west of Rt. 112 (Figure 131).

The first Beaver Brook shelter was built in 1957 in the Dartmouth Outing Club-Large Overhang style by the DOC (Figure 132) at the south end of Beaver Pond, about .08 miles from Rt 112, to replace the Beaver Pond Shelter (1932-1957), which had been located at the southwest corner of the pond. The 1957 shelter was replaced by the DOC in 1993 (Figure 133 and Figure 134), and the location was moved farther west along the trail, about 1.5 miles from Rt. 112 (WMNF CRRR# 1993-04-01). There are two composting toilets and two gravel tent pads south of the shelter (Figure 135).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Ore Hill. Built 2001. WRN0004, Warren. Pemigewasset Ranger District. Non-contributing.

The Ore Hill shelter was located on the Ore Hill Trail, part of the Appalachian Trail, 1.2 miles northeast of Atwell Hill Rd, on a spur trail 300ft east of the AT (Figure 136).

The Ore Hill shelter was built by the DOC in 2001, the first shelter at this location (WMNF CRRR# 97-04-01), and the last shelter added to the system. It was very similar to the 1993 Beaver Brook shelter described above (Figure 137). The shelter caught fire and burned down in 2011. The shelter was not replaced, and its former location was converted into a tent camping site.

Moose Mountain. Built 2004. HNO0008, Hanover. Pemigewasset Ranger District. Non-contributing.

The Moose Mountain shelter is on the Moose Mountain Trail, part of the Appalachian Trail, 0.1 mile north of the crossing of the Old Wolfeboro (Province) Road (Figure 138).

The first Moose Mountain shelter was built in 1931 on the opposite side of the trail from the existing shelter. A new shelter was built in 1963 at a nearby location, 0.25 mile from AT on the Old Wolfeboro Road. The existing Moose Mountain shelter, built by the DOC in 2004, is the third of that name (Figure 139). The existing shelter and 2 tent sites are on a 0.1 mile side path that diverges from and then rejoins the AT (WMNF CRRR# 2002-04-03).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Unique Designs

The shelters described below are of unique design and do not adhere to any of the prevailing styles described above. The Dartmouth Outing Club in particular has developed several unique shelter and toilet designs, but other clubs developed the occasional unique design as well. The shelters are listed in chronological order.

Resolution. Built 1932. SGP0001, Sargents Purchase. Saco Ranger District. Non-Contributing.

The Resolution shelter was located on a short spur trail off of the Davis Path, 3.8 miles northeast of Rt. 302 (Figure 140).

Resolution shelter was documented in 2010 on an NHDHR Individual Inventory Form. The Davis Path accesses the summit of Mt. Washington from the south. The trail was built as a bridle path (the third up Mt. Washington) in 1844-1845 by Nathaniel Davis, who ran the Mt. Crawford House, the former home of Abel Crawford, on what is now Rt. 302 (Sweetser 1881: 137). Mt. Resolution was named by Dr. Bemis, who lived across from the Mt. Crawford House, because it was the point at which Davis became discouraged in the building of his path, but ultimately resolved to continue to Mt. Washington. The path was used by guests of the Mt. Crawford House until 1854, but by 1881 was difficult to follow, had been "abandoned for many years," and was described as long and "highly monotonous" with few good view points (Sweetser 1881: 224-225; AMC 1917: 176). It was re-opened by the Appalachian Mountain Club in 1910 (AMC 1917: 176). Plans were made to construct shelters along the trail in 1911 (Tyler 1912: 401), and by 1913, "The Davis Trail has been made convenient and attractive by the new camps… but water will always be scanty in dry season…" (Tyler 1914: 212-213).

The 1917 White Mountain Guide of the Appalachian Mountain Club (AMC) describes the original "Camp Resolution" as "a comfortable open shelter with room for seven persons" (AMC 1917: 178). Its location is described as 3.8 miles from the trailhead on a branch path off of the Davis Path descending a few rods to the left on a small branch of Sleeper Brook (AMC 1917: 178). The shelter described in 1917 was probably built in 1912 (Therrien 1987: 13; Tyler 1912: 401 and 1914: 212-213), and is pictured in a c.1912 lantern slide in the archives of the Appalachian Mountain Club (Figure 141). By 1927, the AMC "Councillor of Trails" Fred. H. Barrows described the original shelter as being in poor condition, and recommended it be rebuilt as soon as possible (Barrows 1928: 14). The existing shelter was built in 1932, by which time the White Mountain National Forest had acquired the shelter and surrounding forest. The new shelter was built in the same location, based on AMC White Mountain Guide descriptions, but slightly larger (accommodating ten people rather than seven). It was reputedly built by the Civilian Conservation Corps, but the dates don't quite mesh, as the CCC was not active until 1933 (Roenke 1991: 7).

The 1932 Resolution Shelter was built against sloping bedrock, with built-in shelves and extended side walls (Figure 142). The Resolution Shelter was a 12.5 x 15' lean-to built of small-diameter peeled horizontal logs. Corners were not notched, but had vertical corner posts with the butt ends of the horizontal logs flush against them. The roof was constructed of log purlins with peeled sapling vertical sheathing covered with asphalt roll roofing (Figure 143). It was built on granite ledge outcrop, and was built onto the natural slope of the bedrock, so that while the north gable wall was 103 inches high, the south gable wall was only 61 inches high (Figure 144). Its log sills sat directly on ledge, or on dry-laid stone foundation on top of ledge as needed to level the floor/sleeping platform. It had a partially enclosed front that faced a wall of granite ledge for protection from the elements. This design served its purpose well, as two hikers rode out the Great New England Hurricane of 1938 inside the shelter, never realizing the severity of the storm until they emerged and found the trail blocked by tangles of blown down trees (Hutton 1939a: 322). A stone fireplace was located at the base of the wall to reflect heat into the shelter.

Resolution Shelter's location on sloping granite ledge, seen as advantageous to the original builders for the protection the rock outcropping offered, eventually contributed to the deterioration of the shelter. A 2008 condition report by the White Mountain National Forest Facilities Engineer found that:

> The shelter appears to be sliding off the ledge outcropping and the dry-laid stone foundation has failed on both the east and north walls. The east and north walls show obvious signs of separation from the south and west wall, indicating downhill movement of approximate 1 foot since construction. It appears that the primary mechanism holding the structure on the slope at this point is an unhealthy birch tree in the northeast section of the north wall. The structure is leaning heavily on the tree and will likely slide off the ledge outcropping within a year of the removal of the tree. A couple of borings in the east and north walls indicate some rot on the interior side of the beams. The north side was significantly more decayed than any other portion of the structure. (Anderson 2008)

The report went on to recommend continued monitoring of the structure for further movement, and advised against repairing or reconstructing the shelter in its current location due to "the inaccessible nature of the site and the instability of it location on the ledge outcropping" (Anderson 2008). In June 2010 the shelter was closed to public use because of concerns about collapse. The shelter was located within the Presidential Range-Dry River Wilderness Area, a 27,380-acre area on the south side of Mt. Washington designated as Wilderness by the US Congress in 1975 under the Wilderness Act of 1964.

In 2011, Resolution shelter was determined individually eligible for listing in the National Register of Historic Places under Criteria A and C (See Individual Inventory Form). The shelter was dismantled in December 2011, and no longer contributes to the Historic District. The present thematic overview of the WMNF hiking shelter system serves as partial mitigation for the loss of the shelter under a Memorandum of Agreement with the New Hampshire State Historic Preservation Office, resolving the adverse effect to the historic property caused by its removal.

The Perch. Built 1948. LBG0003, Low & Burbanks Grant. Androscoggin Ranger District.

Contributing.

The Perch shelter is located at an elevation of 4,313 feet in the Presidential Range of the White Mountains, near treeline in Cascade Ravine. It is located on The Perch Path, within a few hundred yards of the Israel Ridge Path to the west and Randolph Path to the east on the northern slope of Mt. Adams (Figure 145).

The Perch site consists of the lean-to, an outhouse, a wash pit for screening food scraps from dish water, and four tent platforms maintained by the Randolph Mountain Club. The original Perch was a birch bark structure, accommodating eight people, and built "of unique and highly practical construction" in 1893 by J. Rayner Edmands, an early White Mountain trail-builder (Appalachian Mountain Club 1948: 247, Figure 146). The Perch was once the highest of a series of shelters in Cascade Ravine, which included the no-longer extant Cliff Shelter and Cascade Camp (Hudson 2010: 18-19). The original Perch was destroyed by the hurricane of September 1938 (Hudson 2010: 69).

The Perch was rebuilt on its original site in 1948 in commemoration of Edmands and as a memorial to Louis Fayerweather Cutter, a former RMC president who created maps of the White Mountains from 1885 until his death in 1945 (Figure 147; Hudson 2010: 81-82). A plaque on the shelter reads "J. RAYNER EDMANDS built here in 1893 a birchbark camp which he maintained until his death in 1910. The RANDOLPH MOUNTAIN CLUB, founded to continue the work of Mr. Edmands and other pathmakers, in this new shelter honors also the memory of one who has walked in their footsteps during a lifetime of devotion. LOUIS FAYERWEATHER CUTTER."

The existing Perch is the 1948 structure (Figure 148), built of peeled fir logs and described at the time as being of the design "generally approved by the Forest Service for lean-tos" (Appalachian Mountain Club 1948: 247). The design is unique, however, and appears to be a combination of the 1935 "USFS Plan for Forest Camp Adirondack Shelter" and 1939 "Plans for Appalachian Trail Lean-to," described above. The Perch is notched at three corners, with a partial front wall only on the right side of the opening when facing the shelter, so that the north profile of the shelter resembles the Appalachian Trail Lean-to plan with notched logs at both corners (though the notches on the front end at the level of the overhang), and the south profile of the shelter resembles the 1935 USFS plan, with a notched back corner, and vertical half log pilaster against the flush ends of the side logs at the front opening. The shelter is built into a small bench on the slope of the ravine, with the south end resting on stones nearly at ground level, and the north end on a stone foundation about 4 feet high (Figure 149). The ground slopes up steeply from the south end of the shelter, and a stone retaining wall curves out of the slope to the north in front of the shelter to create a small level opening to access the shelter (Figure 150). The lean-to accommodates eight people, and was originally provided with a stone fireplace for cooking, though open fires are no longer permitted and the fireplace has been dismantled (Appalachian Mountain Club 1948: 247). A Bio-Sun continuous composting toilet with a liquid filtration system was constructed at the Perch in 1997, and there are four wooden tent platforms on the slope southwest of the shelter. In 2010, a rehabilitation project was undertaken by the RMC to rebuild the stone foundation, replace in-kind the bottom courses of rotten logs and stain the logs brown, replace the floor, and replace the wood shingle roof with a standing seam metal roof (WMNF CRRR# 2010-02-01; Healey 2011).

Blue Brook. Built 1959. BEP0005, Beans Purchase. Androscoggin Ranger District. Non-contributing.

The Blue Brook shelter was originally located on the Black Angel Trail, 0.5 mile from Rim Junction (the junction of the Basin and Basin Rim trails) on the east side of Blue Brook, about 2 miles south of the Wild River Campground and 2.5 miles west of Basin Campground in Chatham via Basin Trail. In 2009, the shelter was moved to camp site #12 in the Wild River Campground at the end of the Wild River Road, five miles from Route 113 (Figure 151).

The first Blue Brook shelter was built in 1925 by the Chatham Trail Association, and was a "large open lean-to" (Appalachian Mountain Club 1926: 2). The existing shelter was reportedly reconstructed in 1959 (WMNF CRRR# 2007-02-03). A 2006 photograph shows graffiti carved into a log with a very clear 1947 date, so it is unlikely the shelter was completely replaced. The shelter is large, 20 x 10ft, built of large (8-10 inch) diameter horizontal logs saddle-notched at the back corners and a completely open front. The shelter has a salt box profile and two central log posts supporting the overhang and the ridgepole that divide the shelter into two bays. The wooden floor/sleeping platform extends from the back of the shelter to the ridgepole post, with bare ground under the front third of the shelter. The shelter's profile is unique, with a very slight overhang in the front, and an overhang in the back at the base of the roof formed in both cases by one side log projecting slightly beyond the others (Figure 152).

In 2006, the Wild River area became a Congressionally-designated Wilderness Area, and three shelters inside the Wilderness Area boundary (Blue Brook, Spruce Brook, and Perkins Notch) were targeted for removal (WMNF CRRR# 2007-02-03). Blue Brook shelter was determined not eligible for the National Register of Historic Places due to its age at the time, and in 2009 was dismantled,

transported, reassembled with a new roof, floor decking, and coat of brown paint at its current location in the Wild River Campground (Figure 153). The former shelter location on Blue Brook is now a tent camping site.

While it is currently more than 50 years old and retains its 1959 design and general appearance, the Blue Brook shelter has been moved from its historic location, and is considered a non-contributing element of the White Mountain National Forest Hiking Shelter Historic District.

Jeffers Brook. Built 1981. BEN0004, Benton. Pemigewasset Ranger District. Non-contributing.

The Jeffers Brook shelter is located on a short spur path north of the Town Line Trail, part of the Appalachian Trail, near the Glencliff area of the town of Warren (Figure 154). The shelter is about 0.15 mile west of the trail head on North and South Road (also known as Long Pond Rd.).

The Jeffers Brook shelter was built by the Dartmouth Outing Club, which maintains this section of the Appalachian Trail, in 1981 to replace the Wachipauka Pond shelter formerly located about 2.5 miles west, to fill "the last big hole in the [DOC] shelter chain" (Hooke 1987: 143). The general form of the shelter resembles the "24 Ft Adirondack Shelter, 8-Man" style described above (Figure 62), but Jeffers Brook was built with logs rather than dimensional lumber. The shelter is about 10 x 20 feet, and is built with horizontal logs but no notched corners (Figure 155). Instead, it has vertical log posts at all four corners, with the horizontal logs attached by metal spikes. It has a partially enclosed front with an extended roof overhang. It sits on six poured concrete piers two feet tall, requiring a short flight of stairs to enter (Figure 156). There is a stone fireplace in front of the opening, and a large, relatively new privy 30m to the north (Figure 157). The shelter is in good condition, though there is some slight separation beginning to occur between the horizontal logs and vertical posts.

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Hexacuba. Built 1989. ORF009, Orford. Pemigewasset Ranger District. Non-contributing.

Hexacuba shelter is located on a spur path about 0.2 miles from the Kodak Trail, part of the Appalachian Trail, 1.6 miles south of the south peak of Mount Cube (Figure 158).

Hexacuba shelter was built by the Dartmouth Outing Club in 1989. Former structures in the vicinity include Cube Cabin (1913-1933) and Cube Annex (1914-41), Cube Summit Shelter (1939-72), Cube Shelter-East (1930-38), Cube Shelter-West (c.1940) and (most recently) the Mt. Cube Shelter. (Hooke 1987: DOC Country Map) The names of both the mountain and the shelters are variously given as "Cube" and "Cuba," but the mountain is now generally referred to as Mt. Cube. The current Hexacuba shelter is in about the same location as the c.1940 Cube Shelter-West. The shelter is a unique hexagonal shape, accommodating 10 people. The basic form of the structure is a hexagonal wooden plank platform, 16 feet across, with vertical log posts at the points supporting a hexagonal peaked roof, with large diameter log post in the center of the hexagon from floor to peak. Four of the six sides are filled in with horizontal log walls, and two are open (Figure 159).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Velvet Rocks. Built 2007. HNO0007, Hanover. Pemigewasset Ranger District. Non-contributing.

Velvet Rocks shelter is located 1.7 miles from the Hanover Inn in downtown Hanover on the Velvet Rocks Trail, part of the Appalachian Trail (Figure 160).

The original Velvet Rocks shelter was built by the DOC in 1936 on the Dartmouth campus as part of a membership drive. It was then taken to Boston for a Winter Sports Exposition, and brought back to the Dartmouth campus for Winter Carnival. In the spring of 1937, the shelter logs were dragged up to Velvet Rocks and reassembled (Hooke 1987: 113-114). The shelter was built of horizontal logs with notched back corners, and had a completely open front with overhang. The most recent roof was metal (Figure 161).

The original shelter was replaced by the DOC in 2007 (no CRRR). The new shelter is a small timber framed lean-to designed and built by Dartmouth student Tom Bonamici, with a disproportionately large clear plastic roof (Figure 162).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Eliza Brook. Built 2010. LIN0004, Lincoln. Pemigewasset Ranger District. Non-contributing.

Eliza Brook shelter is located on a short spur (about 55 yards) off of the Kinsman Ridge trail, part of the Appalachian National Scenic Trail, approximately 7.5 miles north of Rte 112 in Kinsman Notch and 4 miles south of Kinsman Pond Campsite (Figure 163).

The existing shelter is the third Eliza Brook shelter. The first was built in 1924 by the AMC on the opposite side of Eliza Brook as part of a system of hiking shelters and huts spaced one-day's hike apart along the Appalachian Trail (Appalachian Mountain Club 1925: 18). The second shelter was built by the AMC in 1963, following the *AMC Vertical Pole* design described above (Figure 164). In 2010, this shelter was demolished, and a new shelter constructed 60ft away (WMNF CRRR# 2010-04-02). The 2010 shelter is 10' by 16', and was designed and prefabricated by John Nininger's Wooden House Company. The design is similar to the 1935 *USFS Plan for Forest Camp Adirondack Shelter*, described above, though with two forked logs supporting the front overhang (Figure 165). The logs were airlifted to the site and assembled by an AMC crew. It is full-scribe Swedish cope, with horizontal cedar logs with notched back corners, and has pressure treated wood for the floor, sills, and roof decking, covered with a metal roof.

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Garfield Ridge. Built 2011. FRC0010, Franconia. Pemigewasset Ranger District. Non-contributing.

Garfield Ridge shelter is located on the Garfield Ridge Hiking Trail / Appalachian Trail, 5 miles from the Garfield Trailhead on the Gale River Road along the Garfield and Garfield Ridge Trails on the northeastern slope of Mt. Garfield (Figure 166).

The existing shelter is the fifth "Garfield" hiking shelter. The first two, log lean-tos built in 1917 and 1924 (Figure 167) and co-existing until 1940, were located .7 miles west on the south side of Garfield Pond. The Garfield Pond campsite was first established in 1916 by Charles Blood of the Appalachian Mountain Club (AMC) during the development and construction of the Garfield Ridge Trail (Blood 1936: 281). In 1940, the first two shelters were removed and a new gabled cabin-style shelter of vertical logs was built on the north side of Garfield Pond (Figure 168). In 1971 this shelter was removed, and the current location away from the pond was chosen because of visitor impacts to vegetation and water quality around the pond. Prior to the 1971 move, the shelters were known as "Garfield Pond Shelter(s)." The 1971 shelter was the first shelter known as the "Garfield Ridge Shelter." It was assembled by the Appalachian Mountain Club trail crew from a prefabricated log kit (Figure 169), and wooden tent platforms with a network of spur access trails were built in the surrounding area to accommodate larger groups. A brass plaque was placed on the campsite access trail in 1973 in memory of Anne Converse Backus of the AMC trail crew.

The shelter is located on the Appalachian Trail, and is one of the most heavily used shelters on the White Mountain National Forest (DuRocher 2011). In 2011, the 1971 shelter was replaced with the existing shelter (WMNF CRRR# 2011-04-04). The shelter was designed and prefabricated by John Nininger's Wooden House Company (Figure 170). It is a lean-to built of horizontal hand-carved white pine logs with full-scribe Swedish cope notches. The front is half open and half enclosed, with an elevated sleeping loft inside the enclosed half. The design includes artistic touches, with a curved branched log and an "H" shaped log incorporated into the structure on either side of the opening. The AMC crew built the floor, foundation, and roof, and the logs were airlifted two at a time and assembled on site. The foundation is ten 8"x8"x4' posts set three feet in the ground, and the roof is cedar shakes (Manikian 2011b).

The shelter is currently less than 50 years old, and so does not yet meet the eligibility requirements for listing on the NRHP. However, when the shelter becomes 50 years old, it should be re-evaluated for its inclusion in the White Mountain National Forest Historic Hiking Shelters District.

Comparative Evaluation

The White Mountain National Forest Hiking Trail Shelter System is unique in the state of New Hampshire. There are other hiking shelters in the state, and other shelter systems in public forests and parks across the United States, but the White Mountain shelter system, along with the contemporary shelters of New York's Adirondack Mountains, may be seen as the prototype for many of these. It was a source of inspiration for the system of shelters along the Appalachian Trail from Georgia to Maine, and was an early and integral piece of the AT system. The AT shelter system has not yet been evaluated as an historic district, though some shelters outside of New Hampshire have been determined individually eligible and/or are listed on the National Register of Historic Places, such as the Blood Mountain shelter in Georgia, and several Adirondack-style shelters built by the CCC on a former section of the Appalachian Trail are listed as part of the Connecticut State Park and Forest Depression-Era Federal Work Relief Programs Structures multiple property listing (Cream Hill shelter, American

Legion Forest CCC shelter, and Red Mountain Shelter). Four stone trail shelters built by the CCC in Mt. Rainier National Park in Washington are individually listed on the NRHP (the Indian Bar, Summerland, Sunset Park, and North Mowich shelters), but no other hiking trail shelter system is listed. The Adirondacks eventually became a state administered park and forest preserve in 1892, while the White Mountains became a federally owned National Forest in 1918. There are around 250 shelters in the 2.6 million acres of the Adirondack Park administered by various regions of the New York Department of Environmental Conservation, but no comprehensive inventory or evaluation of their historic significance has been undertaken to date.

22. Statement of Significance

The White Mountain National Forest Hiking Shelter System is eligible for listing in the National Register of Historic Places under Criteria A and C.

Criterion A: The shelter system is a vital piece of the development of outdoor recreation in New Hampshire, and interweaves with many significant themes in state history. The shelter system is associated with the land conservation movement and the social clubs, such as the Appalachian Mountain Club, Randolph Mountain Club, and Dartmouth Outing Culb, that developed to support it; the early development of hiking and skiing as recreational activities in New Hampshire and more broadly in the United States in the late 19th and early 20th centuries; and the expanding popularity of hiking and outdoor recreation in the mid-20th century. The existence of the shelter system contributed to tourism, a vital economic force in the White Mountain region as the railroad logging era came to an end; hikers and trail club members from Boston often based their trips out of local White Mountain inns and boarding houses. The shelters represent federal programs in New Hampshire as a component of the WMNF recreation program in the early 20th century and as part of the legacy of the Civilian Conservation Corps in New Hampshire. The shelter system was significant in the development of the Appalachian National Scenic Trail, and the shelters continue to serve their original role as focal points for the vibrant hiking communities of the White Mountains and the Appalachian Trail.

Criterion C: The White Mountain National Forest Hiking Trail Shelter System is a rare and early example of an extensive network of shelters intended to facilitate and enhance backcountry hiking and camping. The shelters are examples of "Adirondack Rustic" architecture as it evolved from the late 19th century, through the WPA-era in the 1930s, and was adapted to changing hiking shelter management in the White Mountains. Two of the shelters have previously been determined to be individually eligble for the National Register of Historic Places as components of the White Mountain shelter system (Perkins Notch and Resolution), and in the year 2000 the Sandwich Range Shelters Historic District (NHDHR No. WAT0001), a nonextant subset of the White Mountain National Forest hiking shelter system that included the Camp Shehadi, Camp Heermance, and Camp Rich shelters, was determined eligible for the NRHP (Monroe 2000; New Hampshire Division of Historic Resources 2000). The Sandwich Range shelters were considered significant in part because hiking shelters as a property type are becoming increasingly rare in the White Mountains as they continue to be removed in favor of less developed backcountry camp sites (New Hampshire Division of Historic Resources 2000).

Although the shelter system has continuously evolved with shelter replacements, removals, relocations, and changing designs and materials, the system as a whole represents a significant and distinguishable entity, retaining since its first inception in the 1870s its essential character as

a network of small open structures in a forest setting providing modest overnight shelter to White Mountain hikers.

23. Periods(s) of Significance. 1922-1970. Date of earliest extant shelters to 50 years before present plus five years, recognizing the significance of the mid-century recreation boom and active shelter construction and replacement program in the late 1960s. Fifteen shelters built after 1970 are considered noncontributing resources to the historic district; however, when the shelters become 50 years old, they should be re-evaluated for inclusion in the White Mountain National Forest Historic Hiking Shelters District.

24. Statement of Integrity. The White Mountain National Forest Hiking Shelter System retains integrity of location, design, setting, materials, workmanship, feeling and association. The shelter system has retained its essential location and setting along the hiking trails of the White Mountains. It continues to be used for its original purpose, and one can experience camping at a White Mountain hiking shelter today in much the same way experienced by hikers 100 years ago. Of the 41 shelters included in this document, 22 are considered contributing elements and 19 are noncontributing (mostly because they are not yet 50 years old). Of the contributing shelters, two were built in the 1920s, four in the 1930s, one in the 1940s, four in the 1950s, and thirteen in the 1960s. 85% of all shelters are Adirondack-style lean-to shelters (100% of contributing shelters), and 15% are open shelters of other designs (five Mahoosuc style and one hexagon). 66% of all shelters and 54% of contributing shelters are log, with the remainder dimensional lumber. The same organizations (i.e., the White Mountain National Forest, Appalachian Mountain Club, Dartmouth Outing Club, Randolph Mountain Club, and Appalachian Trail Conservancy) have been associated with the shelter system since its early development in the late 19th and early 20th Centuries. 37% of all White Mountain shelters (8% of contributing shelters) are on the Appalachian Trail, and 63% are located on other trails in the White Mountain National Forest Trail System. Hiking shelters in the White Mountains are located an average of 2.6 miles from the nearest road/trailhead, with a range of 0 to 8 miles. The shelter system's varied materials, workmanship, and designs demonstrate evolution through time as new approaches to shelter management developed and/or were discarded.

25. Boundary Justification. The White Mountain National Forest Hiking Shelter System historic district occupies 6.82 acres within the approximately 700,000 acres of National Forest lands in New Hampshire. The boundary of the shelter system is discontiguous and includes an area with a radius of 20 meters around each contributing shelter. This area delineates a definable geographic area in which each shelter and its immediate setting are concentrated. The boundary is drawn to encompass the historically used areas within and around the shelters, including associated open activity area and surrounding forested area and natural features, as well as a portion of the hiking trail accessing the shelter, but excluding generally more distant toilet structures and tent platforms, which are modern additions to the shelter sites. A standard boundary for all shelters eliminates uncertainty about the district boundary and facilitates ongoing and future management of the shelters as both historic structures and active recreation sites. The hiking trail system in the White Mountains is also likely eligible for the NRHP for its association with the trail shelters, the NRHP-eligible AMC huts, and as an entity of historic significance in its own right, but evaluation of the 1200 miles of hiking trails in the White Mountains and their rich history is beyond the scope of the current survey.

26. Boundary Description. The boundary for each of the 22 contributing shelters is measured from the center of each shelter in a circle with a radius of 20 meters, encompassing 0.31 acres at each shelter, for a total of 6.82 acres.

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1997	CRRR# 1997-04-01. Ore Hill Shelter.
2002	CRRR# 2002-04-03. Moose Mountain Shelter Replacement.
2007	CRRR# 2007-02-03. Evaluation of Three Recreation Shelters [Spruce Brook, Blue Brook, Perkins Notch]
2010	CRRR# 2010-02-01. The Perch Shelter Repairs.
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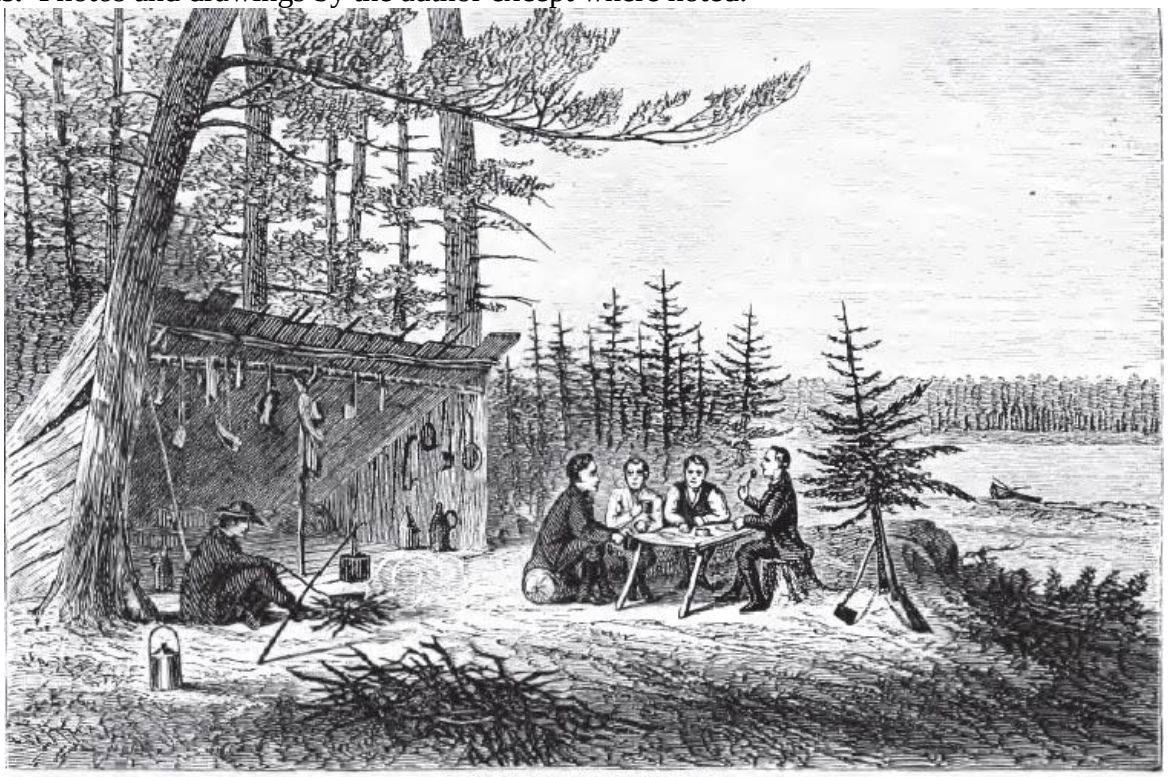
2011	CRRR# 2011-04-04. Garfield Ridge Shelter Replacement.
	CRRR# 2011-05-02. Resolution Shelter Removal.
	CRRR# 2011-05-09. Sawyer Pond Shelter Stabilization.
2012	CRRR# 2012-05-13. Camp Penacook Shelter Sill Log Replacement.
	CRRR# 2012-05-14. Flat Mountain Pond Shelter Sill Log Replacement.
2014	CRRR# 2014-05-01. Presidential-Dry River Wilderness Trail Repair Project.
	CRRR# 2014-05-02. Mountain Pond Shelter Repairs.
2015	CRRR# 2015-04-03. Ethan Pond Shelter Stabilization.

28. Surveyor's Evaluation

NR listed:	district	☐	NR eligible:		NR Criteria:	A	☒
	individuals		district	☒		B	☐
	within district	☐	not eligible	☐		C	☒
Integrity:	yes	☒				D	☐
	no	☐	more info needed	☐		E	☐

If this Area Form is for a Historic District: # of contributing resources: 22
# of noncontributing resources: 19

Figures. Photos and drawings by the author except where noted.



A LODGE IN THE WILDERNESS.

Figure 1. Temporary bark shelter. From Descriptive Guide to the Adirondacks by E.R. Wallace. Syracuse, NY: Watson Gill, 1882.

Figure 2. Example of *Birch Bark* style shelter facing rock outcrop. Imp shelter, c.1905. Lantern slide in the Appalachian Mountain Club Archives, 5 Joy Street, Boston. Call number LS 35.12.

Figure 3. Example of *Log Shed* style shelter. AMC Great Gulf Shelter, built 1910. Guy Shorey postcard.

Figure 4. Example of *Small-Log Saltbox* style shelter. AMC Liberty Spring Shelter, 1923. Lantern slide by Karl Harrington, Appalachian Mountain Club Archives, 5 Joy Street, Boston. Call number LS 41.58.

Figure 5. Example of *Forest Service Vertical and Horizontal Log* style shelter, c.1923. Hermit Lake A shelter (1920-1960). Guy Shorey postcard.

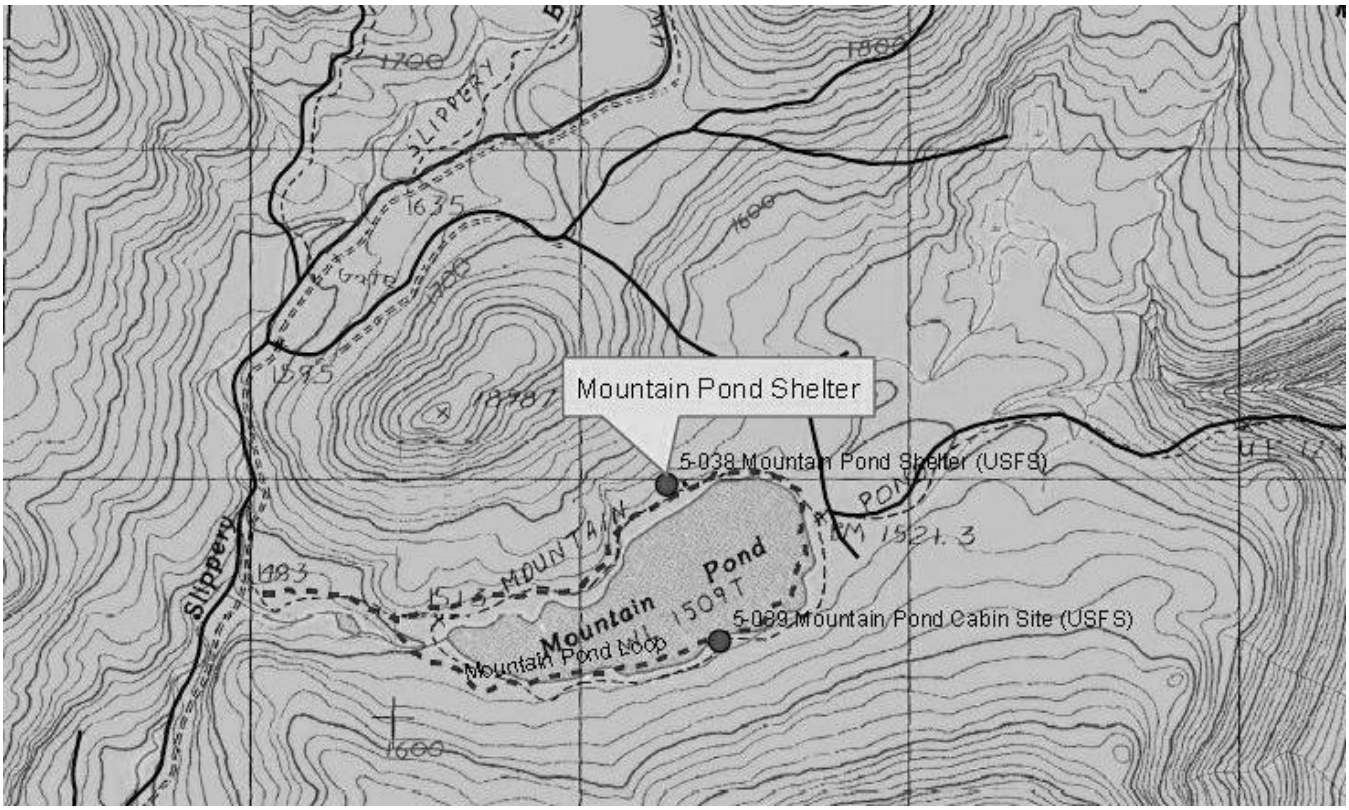


Figure 6. Mountain Pond shelter location map. USGS 7.5' Chatham Quadrangle.

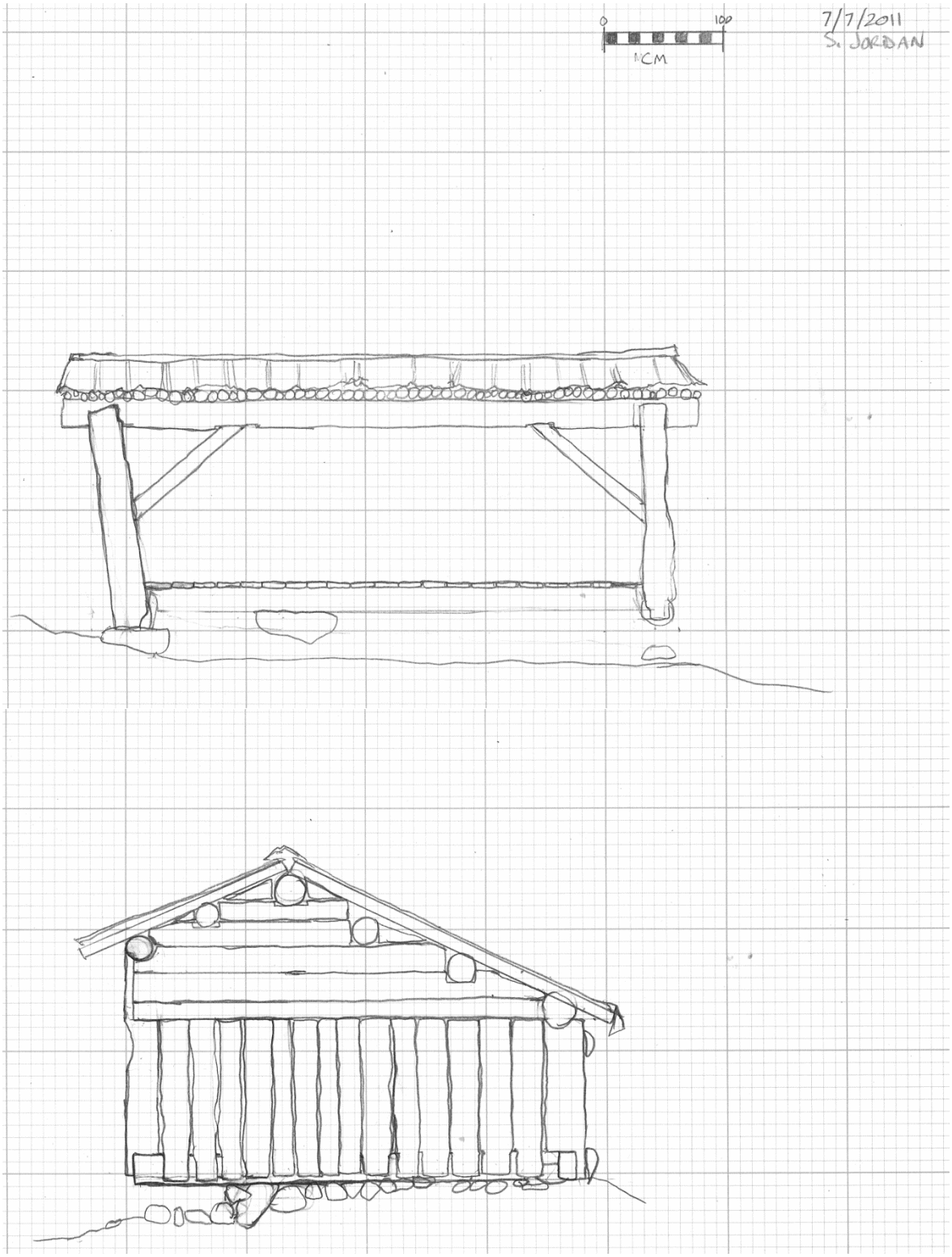


Figure 7. Mountain Pond shelter drawings. Above: South (front) elevation. Below: East side elevation. July 7, 2011.

Figure 8. Mountain Pond shelter, April 1935. View NE. US Forest Service photo. WMNF Negative No. 301502.

Figure 9. Mountain Pond shelter, July 2011. View NW. US Forest Service photo.

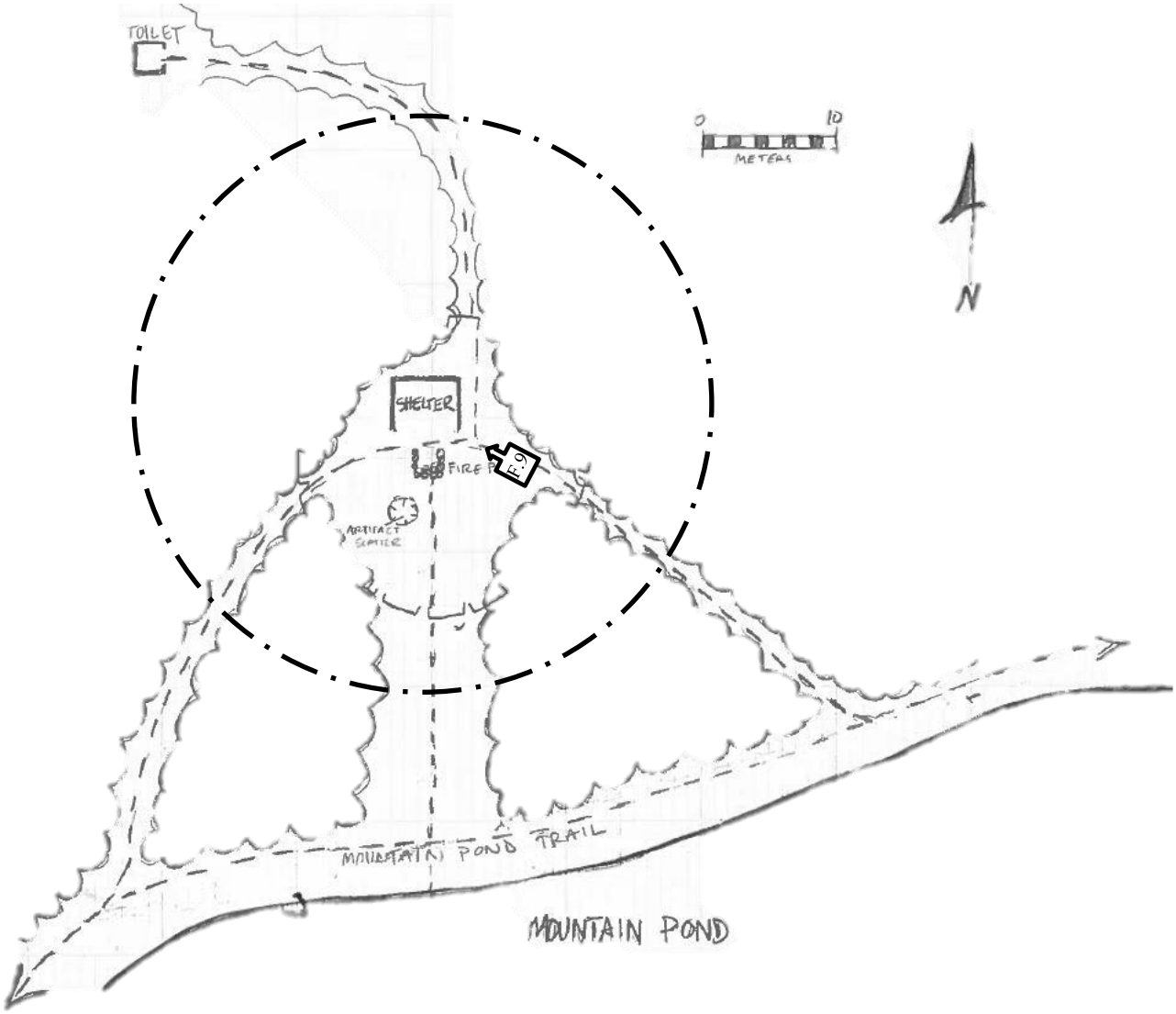


Figure 10. Mountain Pond shelter sketch map, July 7, 2011. Dashed circle indicates approximate location of 20m radius site boundary.

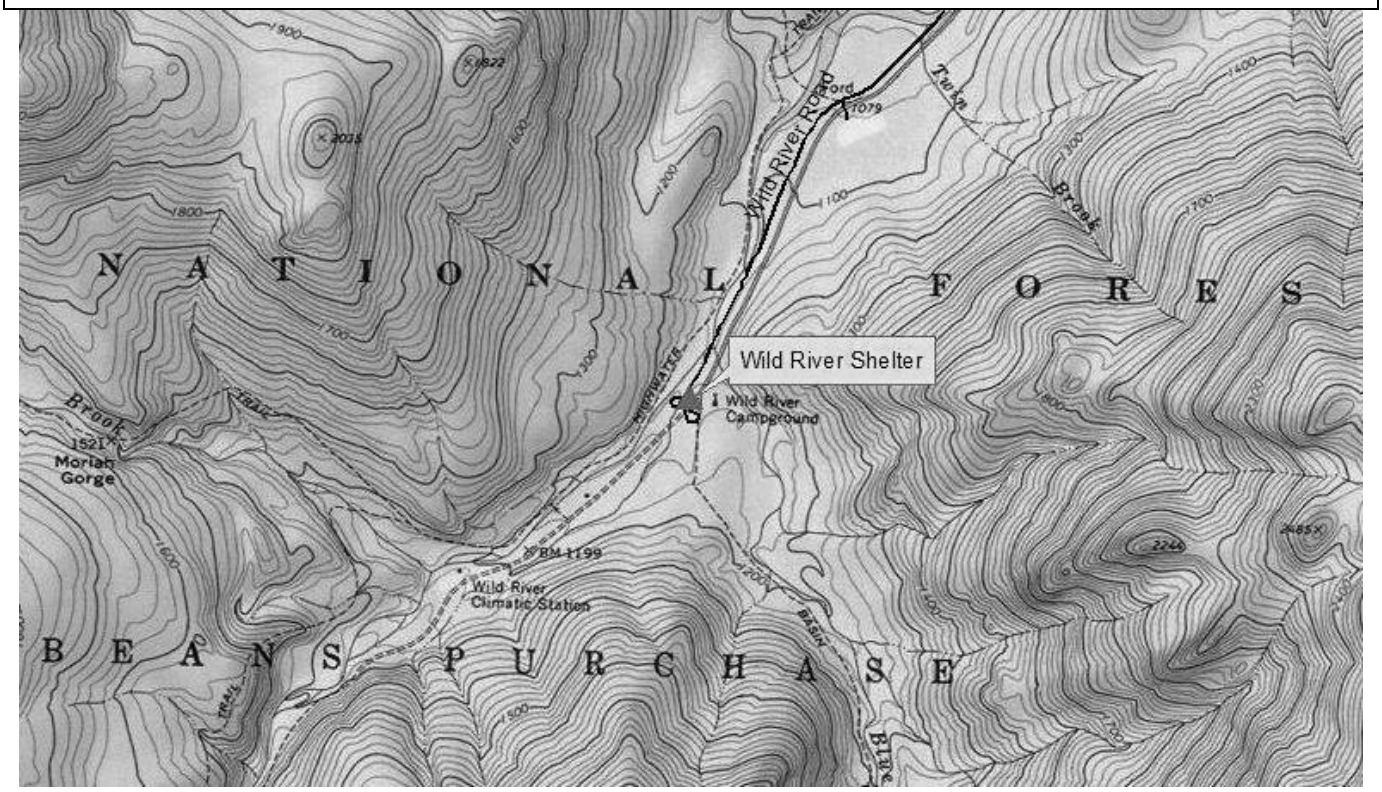


Figure 11. Wild River shelter location map. USGS 7.5' Wild River Quadrangle.

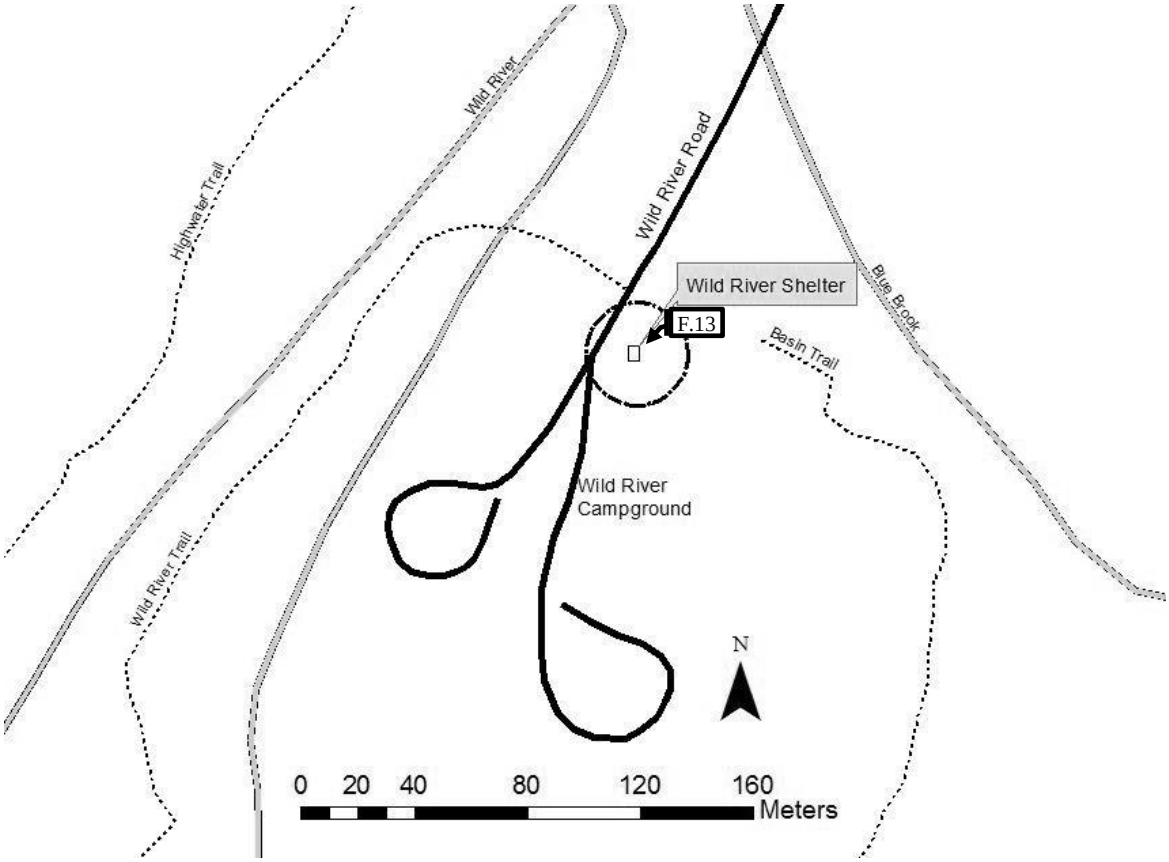


Figure 12. Wild River shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

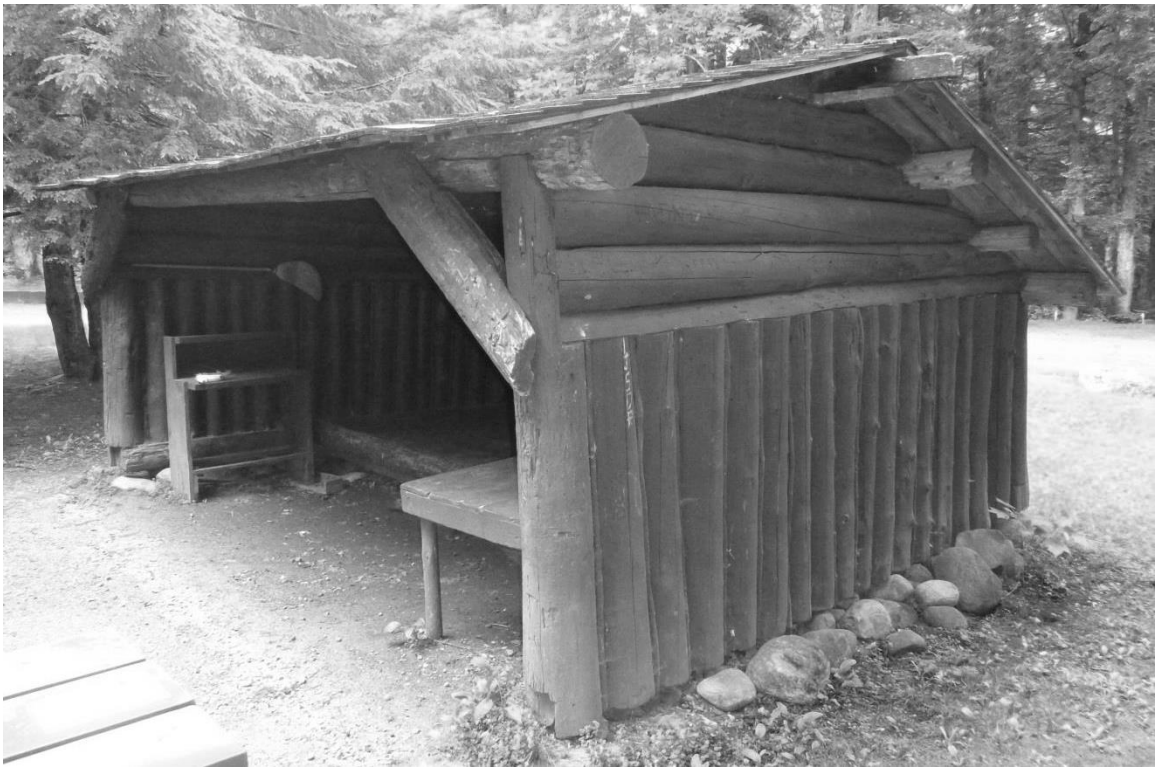


Figure 13. Wild River shelter, June 12, 2014. View SW.

Figure 14. "Leanto shelter at Wild River Campground," 1926. View NW. US Forest Service Photo. WMNF Negative No. 212241.

Figure 15. "Camping in Adirondack shelter at Wild River Campground, Evans Notch Ranger District," August 1958. View SW. US Forest Service photo. WMNF Negative No. 487788.

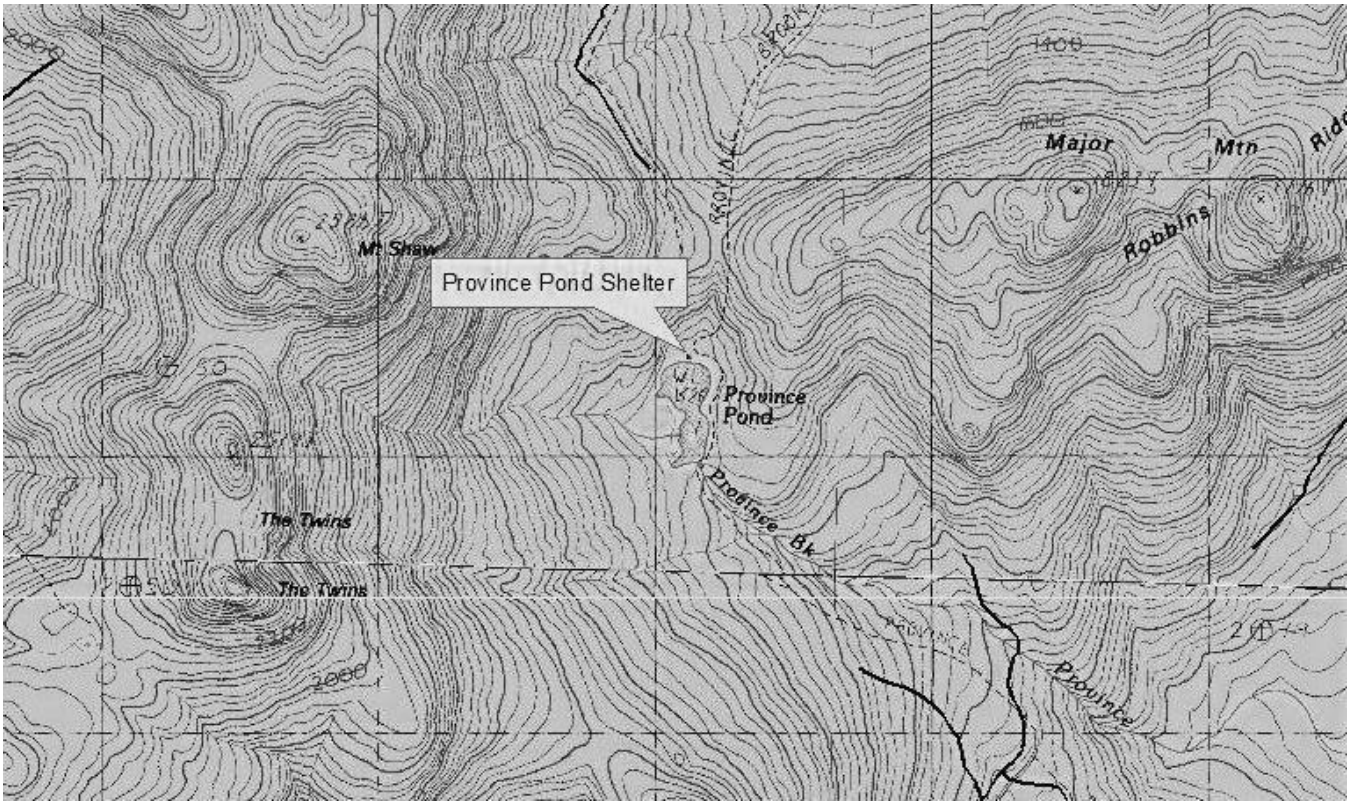


Figure 16. Province Pond shelter location map. USGS 7.5' Chatham Quadrangle.

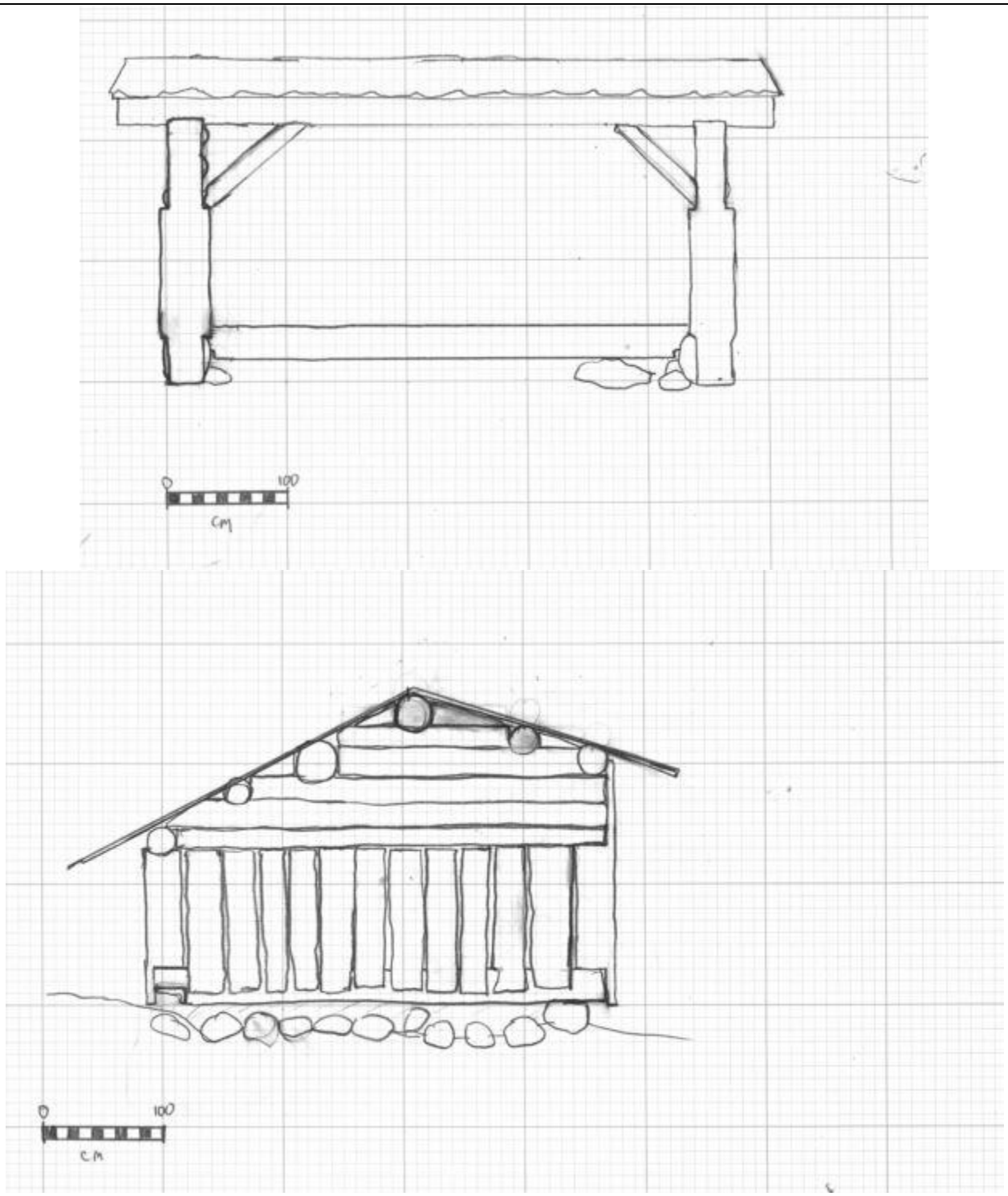


Figure 17. Province Pond shelter drawings. Above: South (front) elevation. Below: West side elevation. September 28, 2011.

Figure 18. Province Pond shelter, September 28, 2011. View NE.

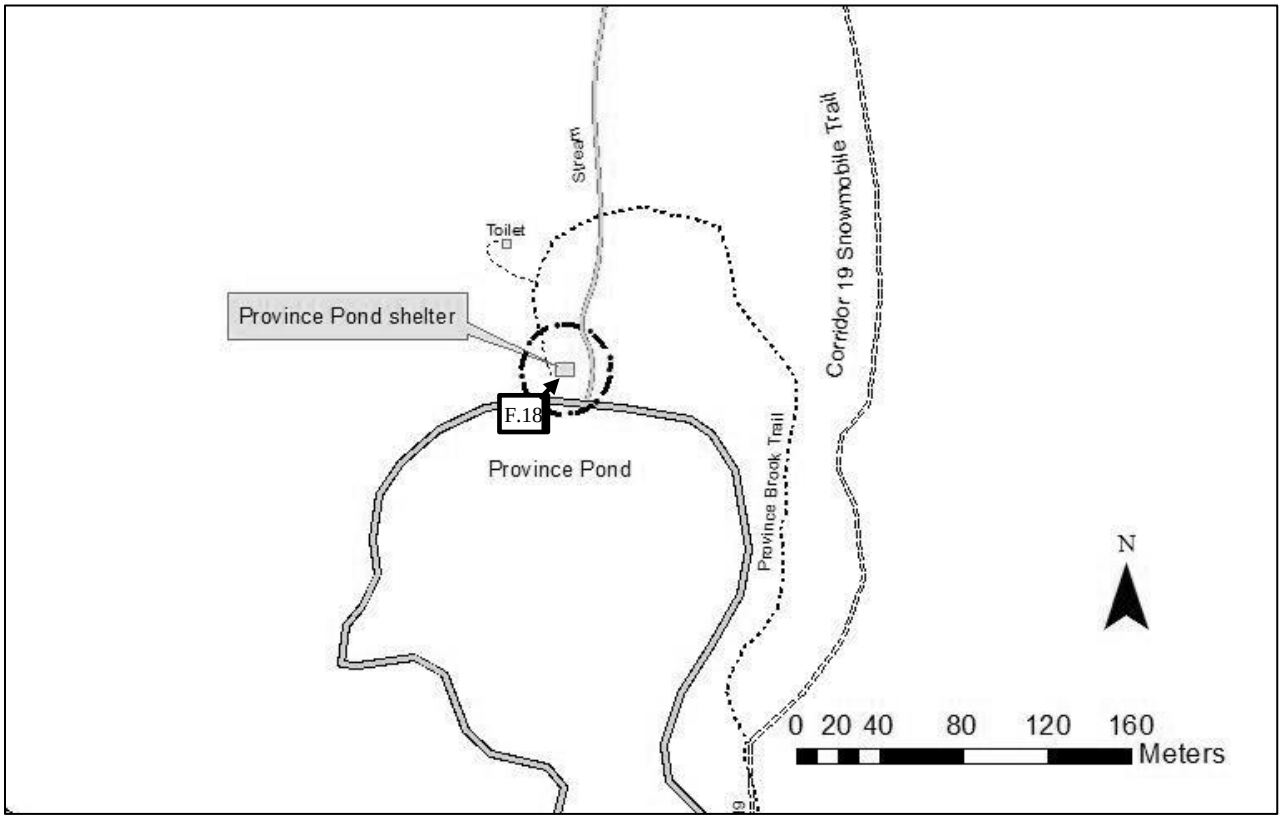


Figure 19. Province Pond shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

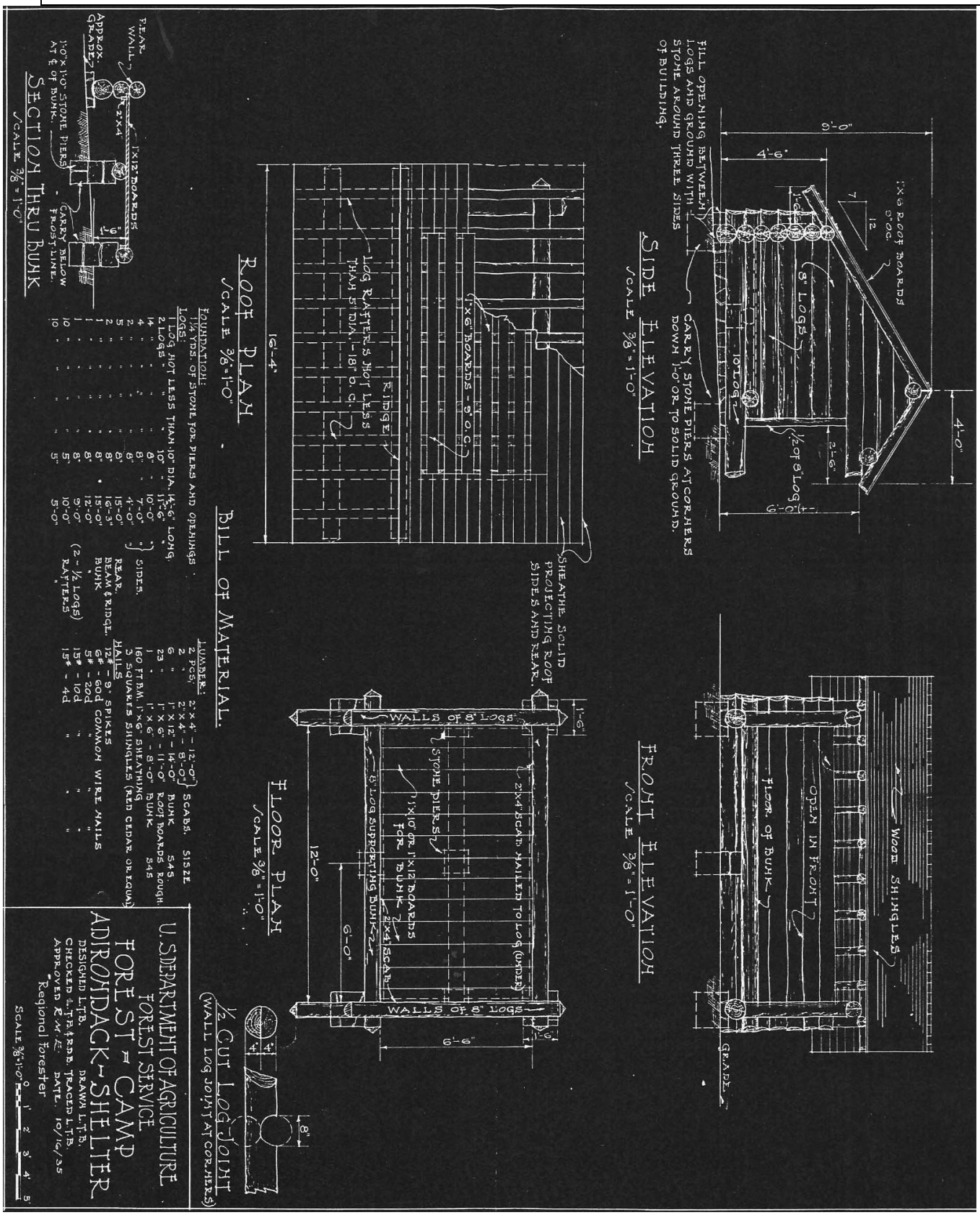


Figure 20. USDA Forest Service plan for Forest Camp Adirondack Shelter, 1935.

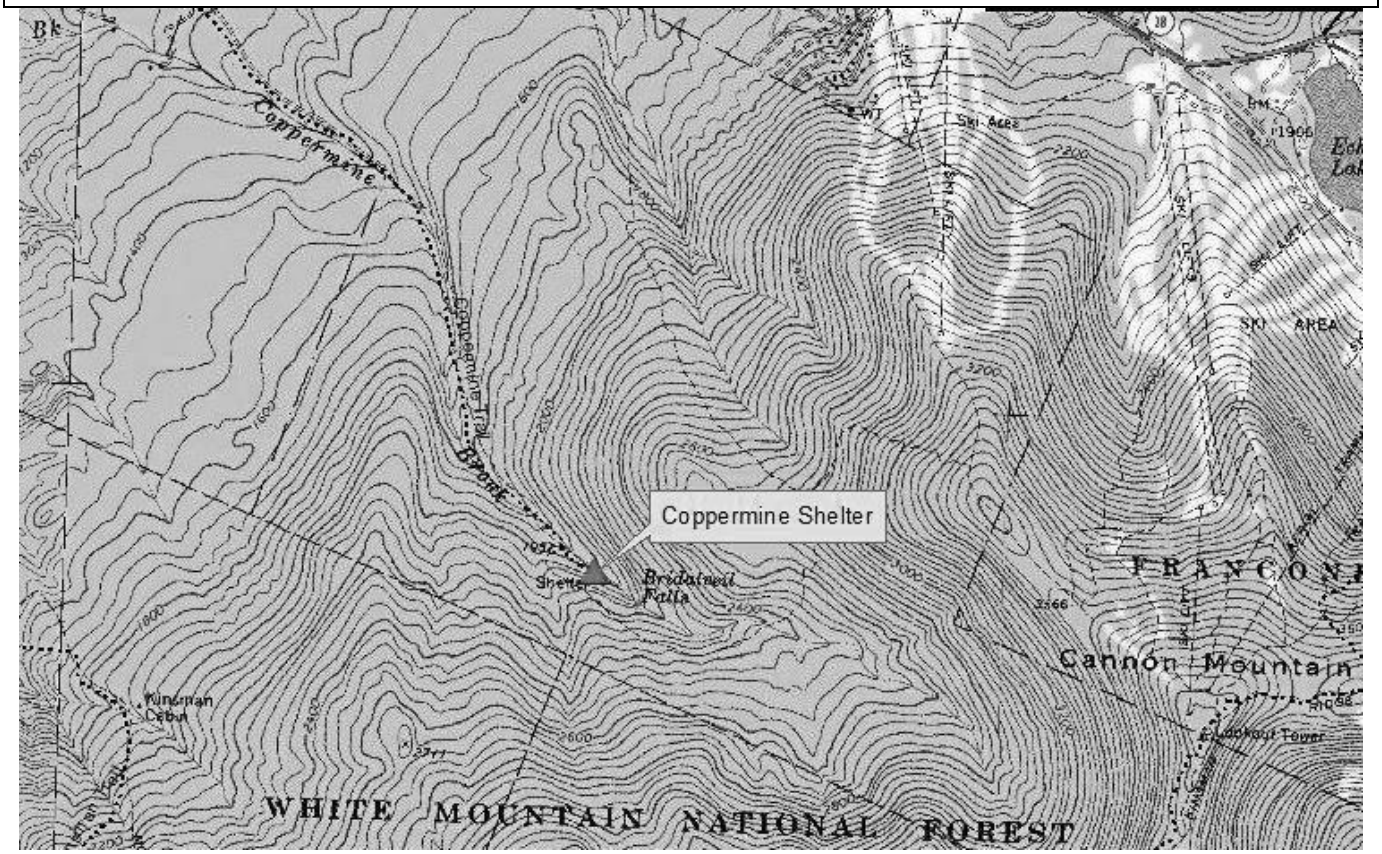


Figure 21. Coppermine shelter location map. USGS 7.5' Franconia Quadrangle.

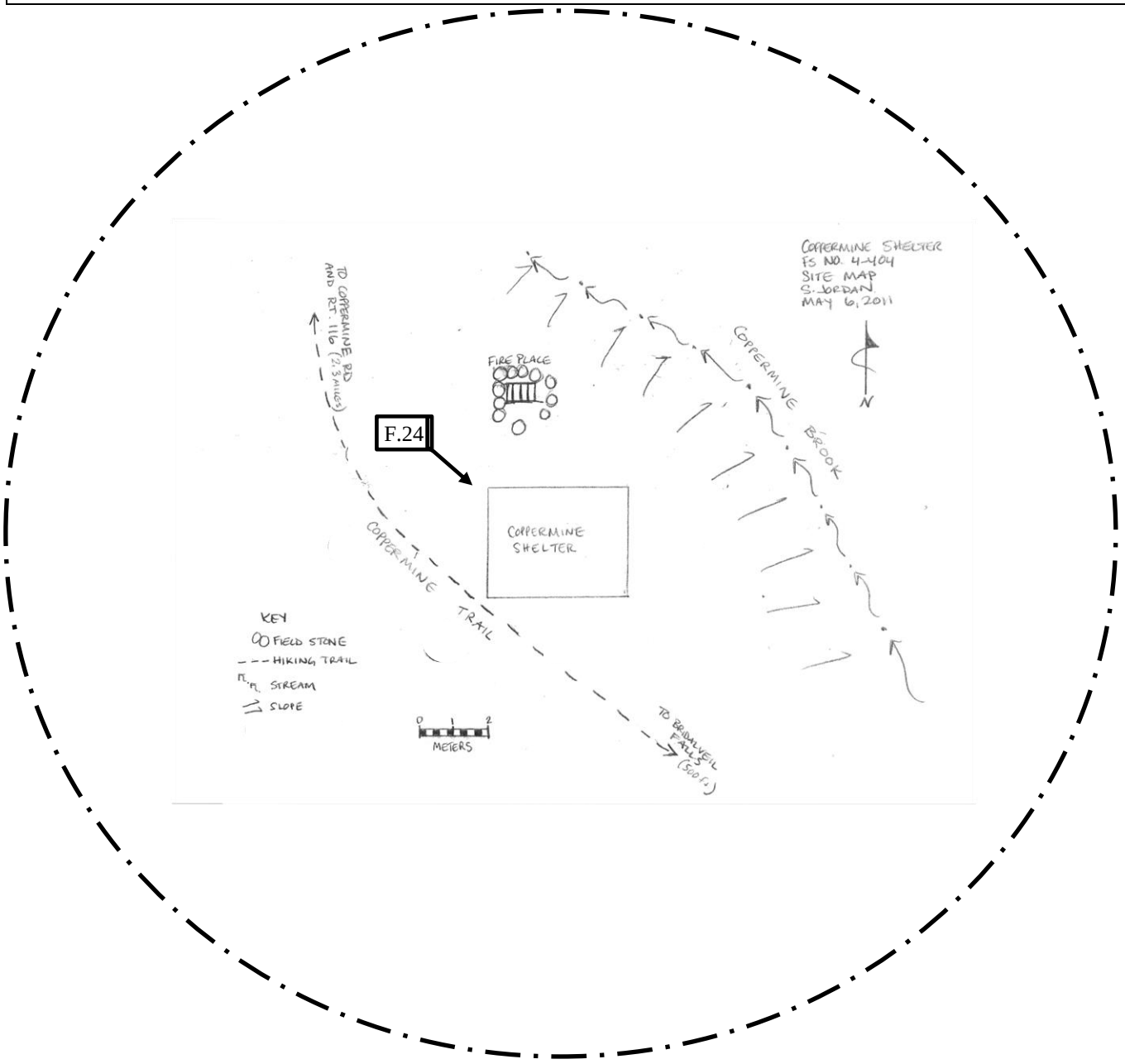


Figure 22. Coppermine shelter sketch map, May 6, 2011. Dashed circle indicates approximate location of 20m radius site boundary.

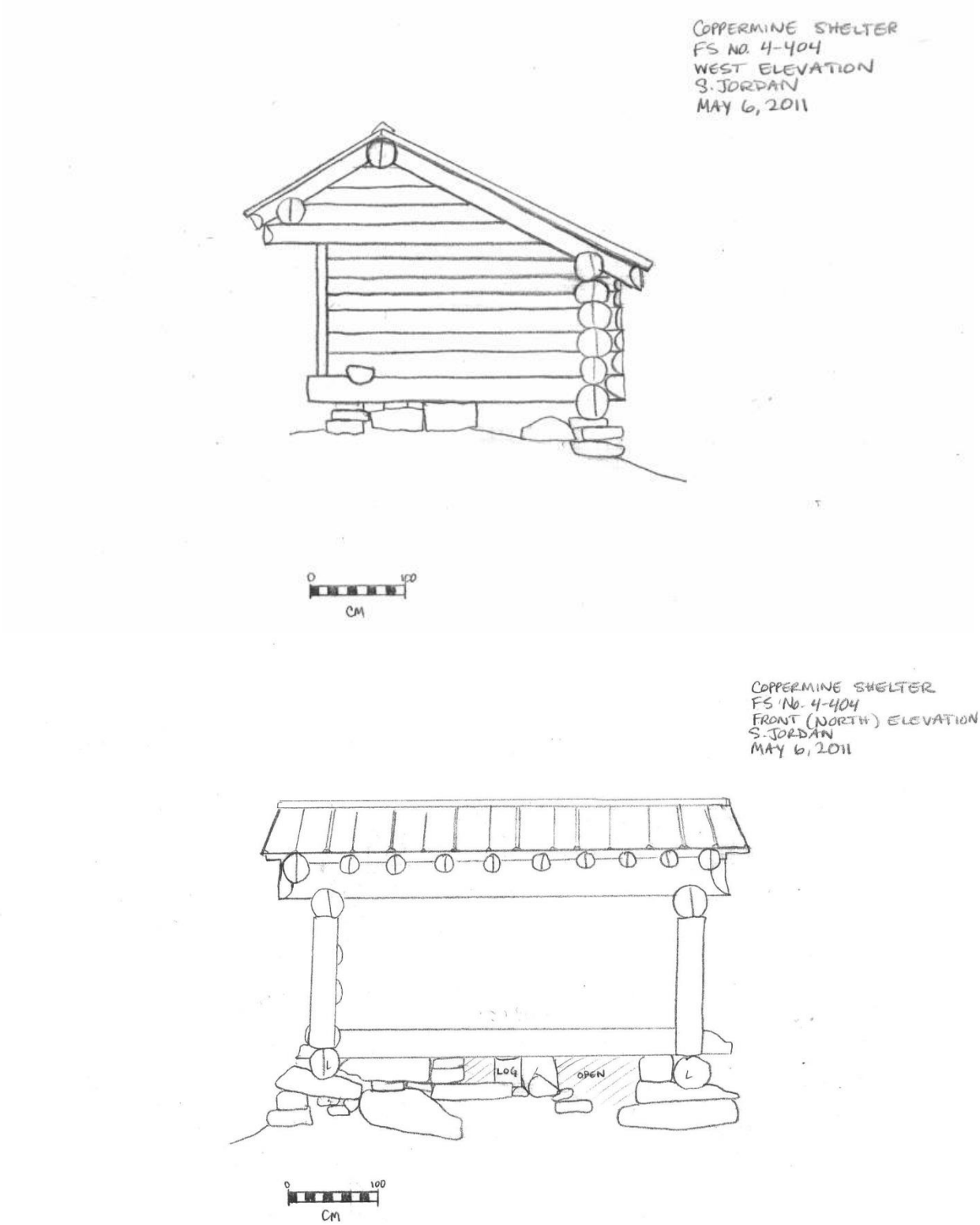


Figure 23. Coppermine shelter drawings. Above: West side elevation. Below: North (front) elevation. May 6, 2011.

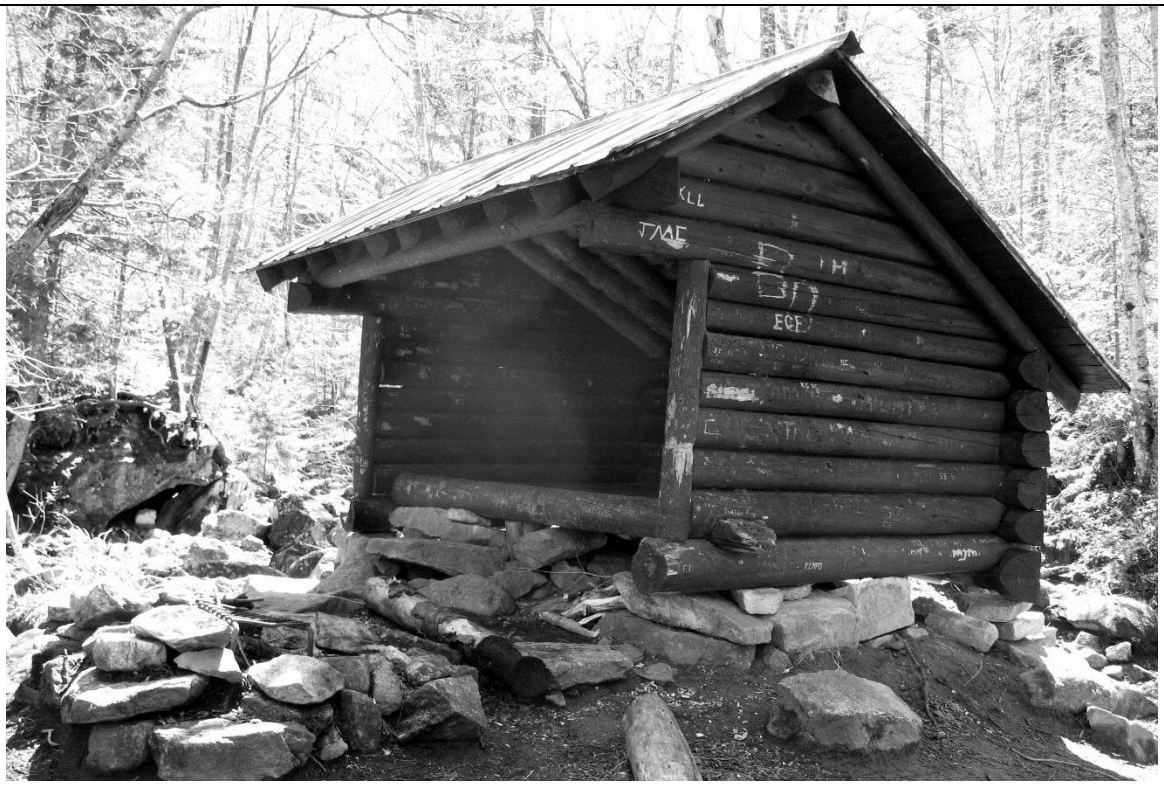


Figure 24. Coppermine shelter, May 6, 2011. View SE.

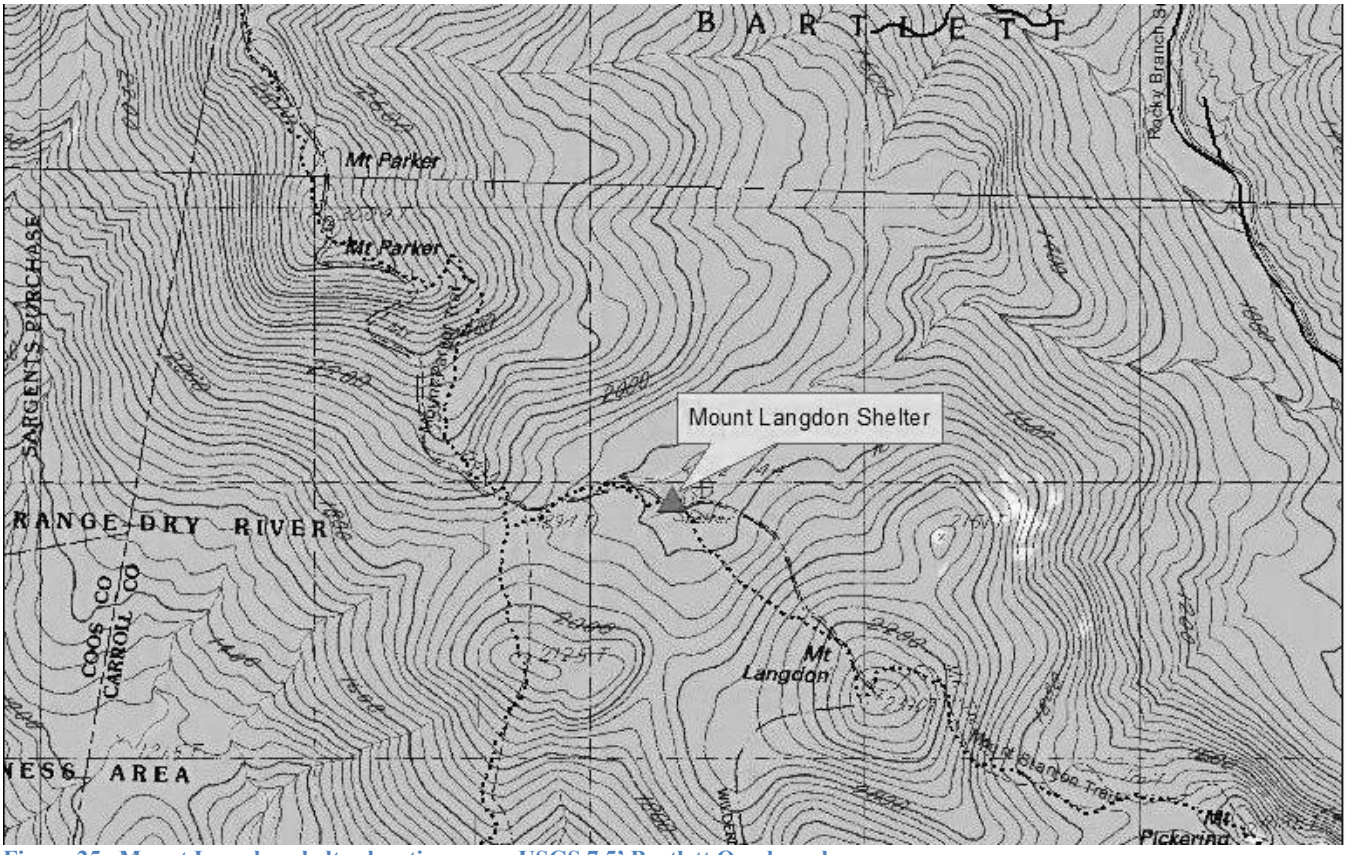


Figure 25. Mount Langdon shelter location map. USGS 7.5' Bartlett Quadrangle.

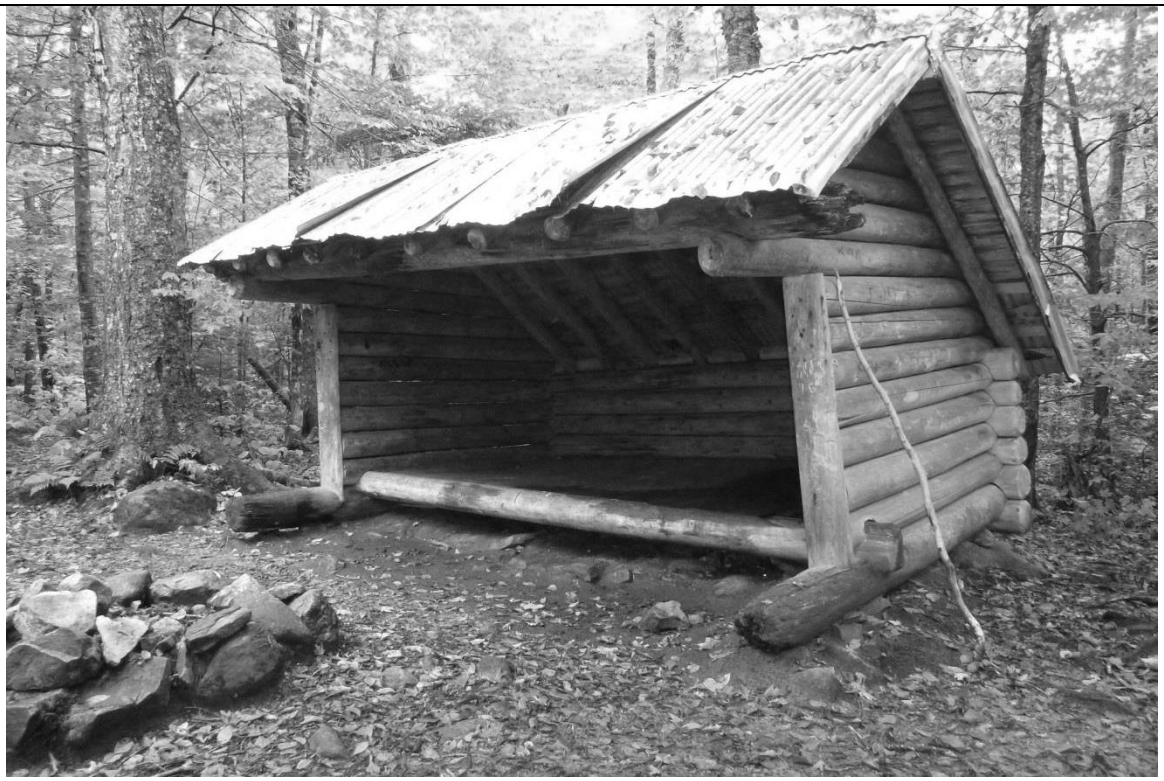


Figure 26. Mount Langdon shelter, October 3, 2011. View SW.

Figure 27. Mount Langdon shelter. Water damage and floor rot due to roof leak, northeast corner. October 3, 2011.

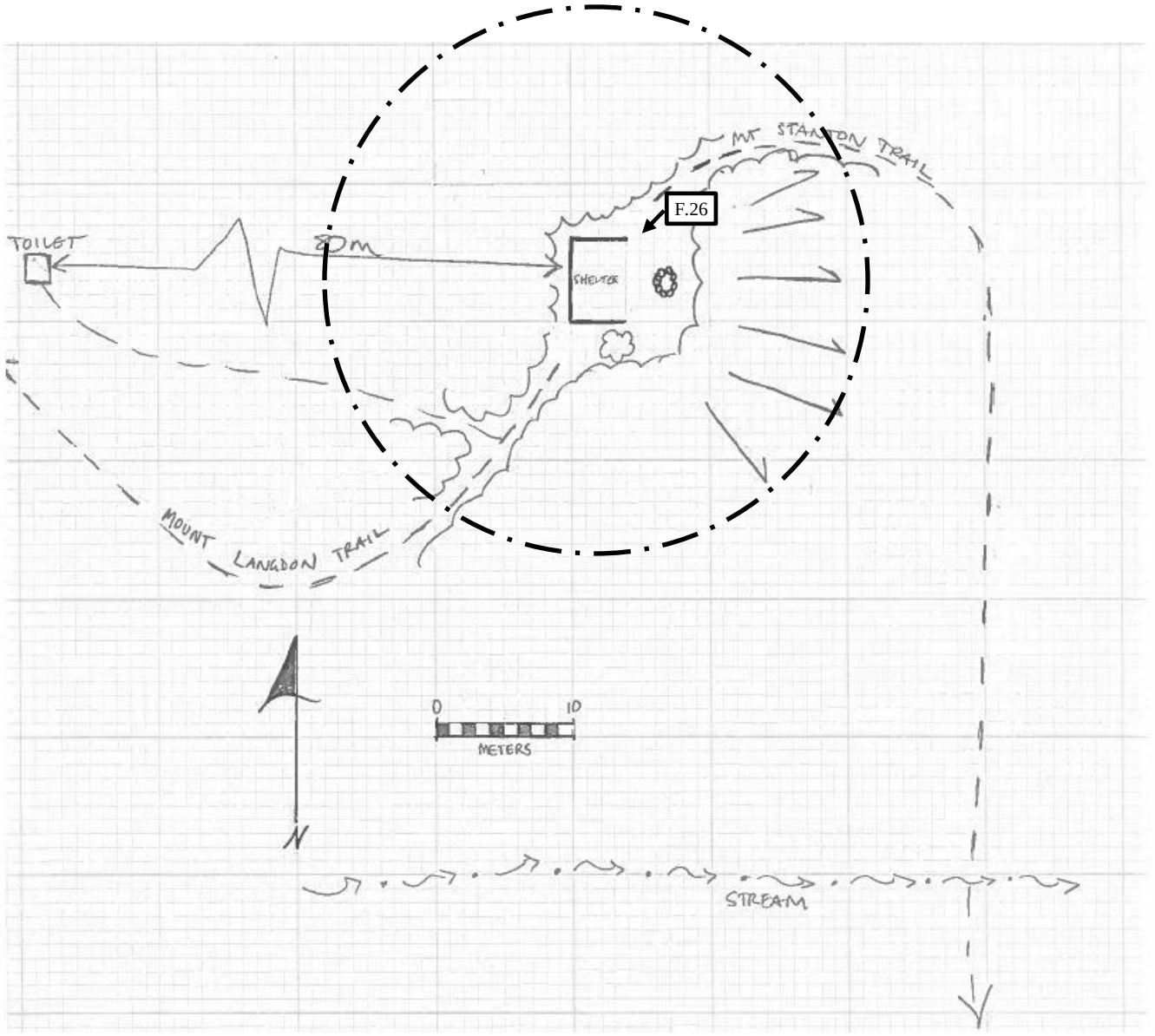


Figure 28. Mount Langdon shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

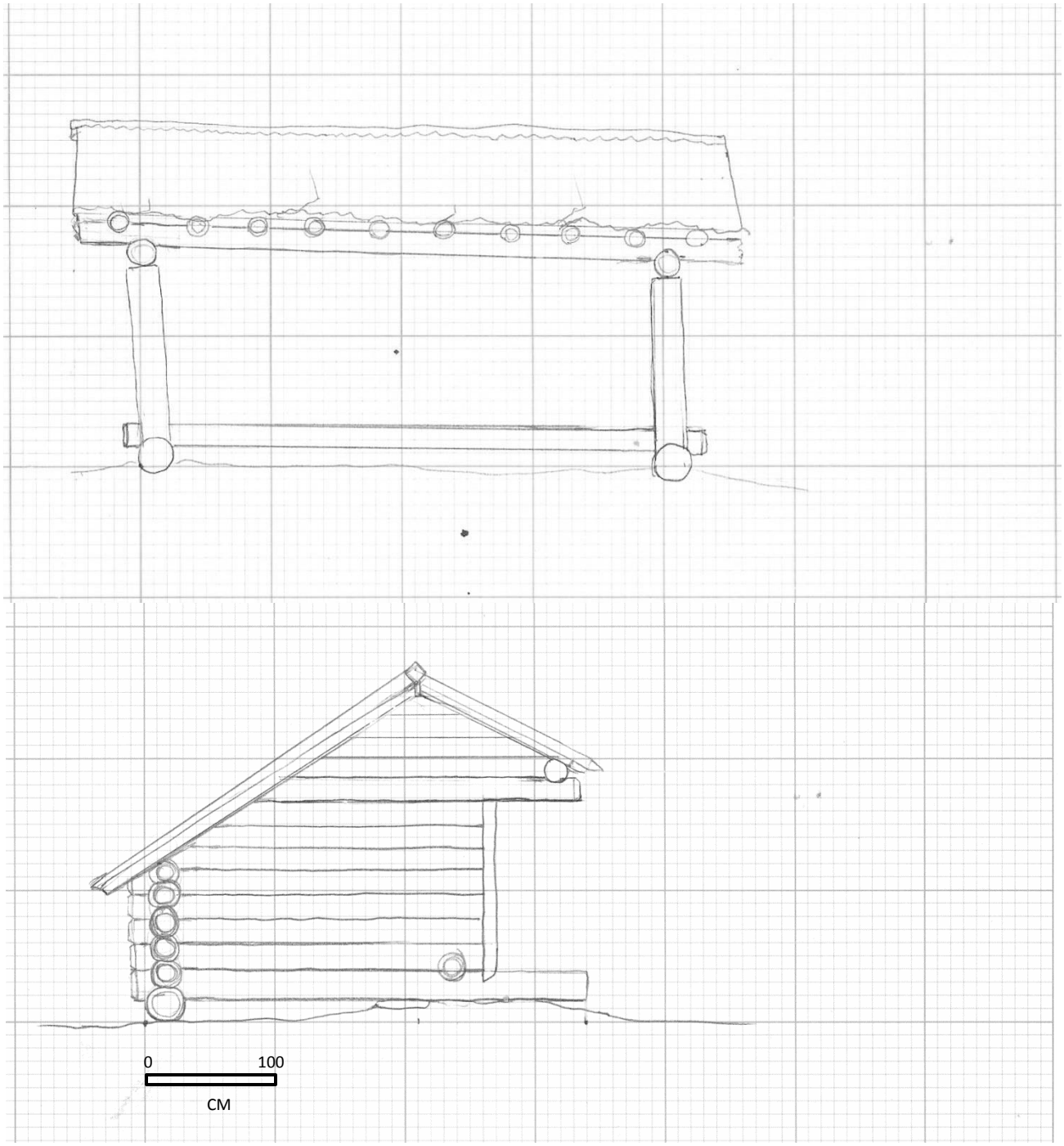


Figure 29. Mount Langdon shelter drawings. Above: East (front) elevation. Below: South side elevation. October 3, 2011.

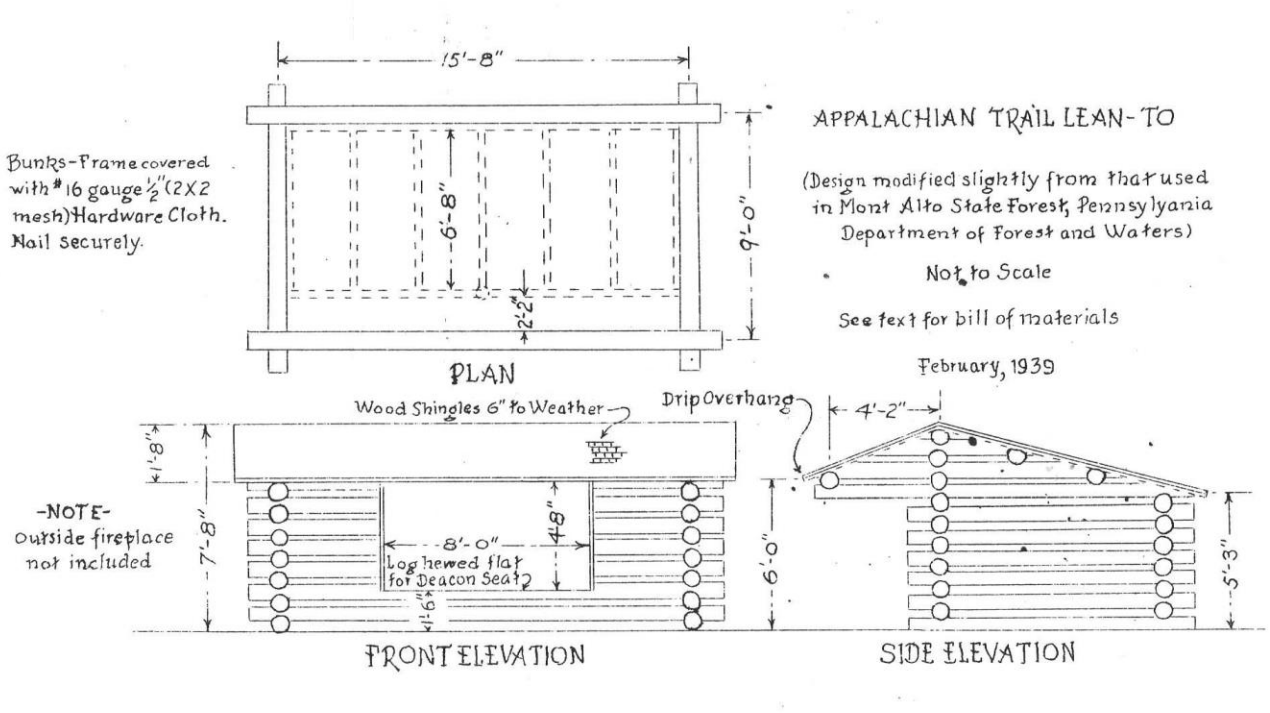


Figure 30. Plan for Appalachian Trail Lean-To, 1939. Appalachian Trail Conference.

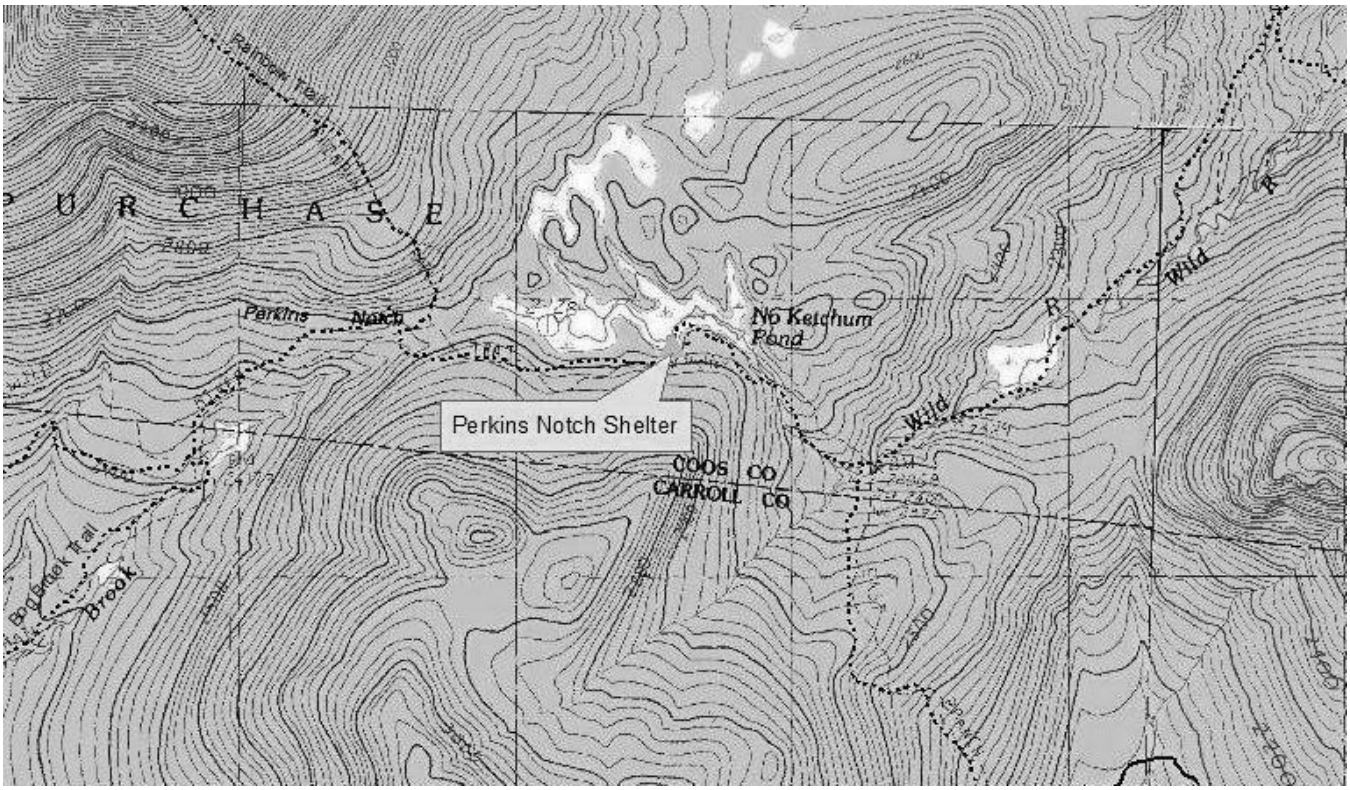


Figure 31. Perkins Notch shelter location map. USGS 7.5' Jackson Quadrangle.

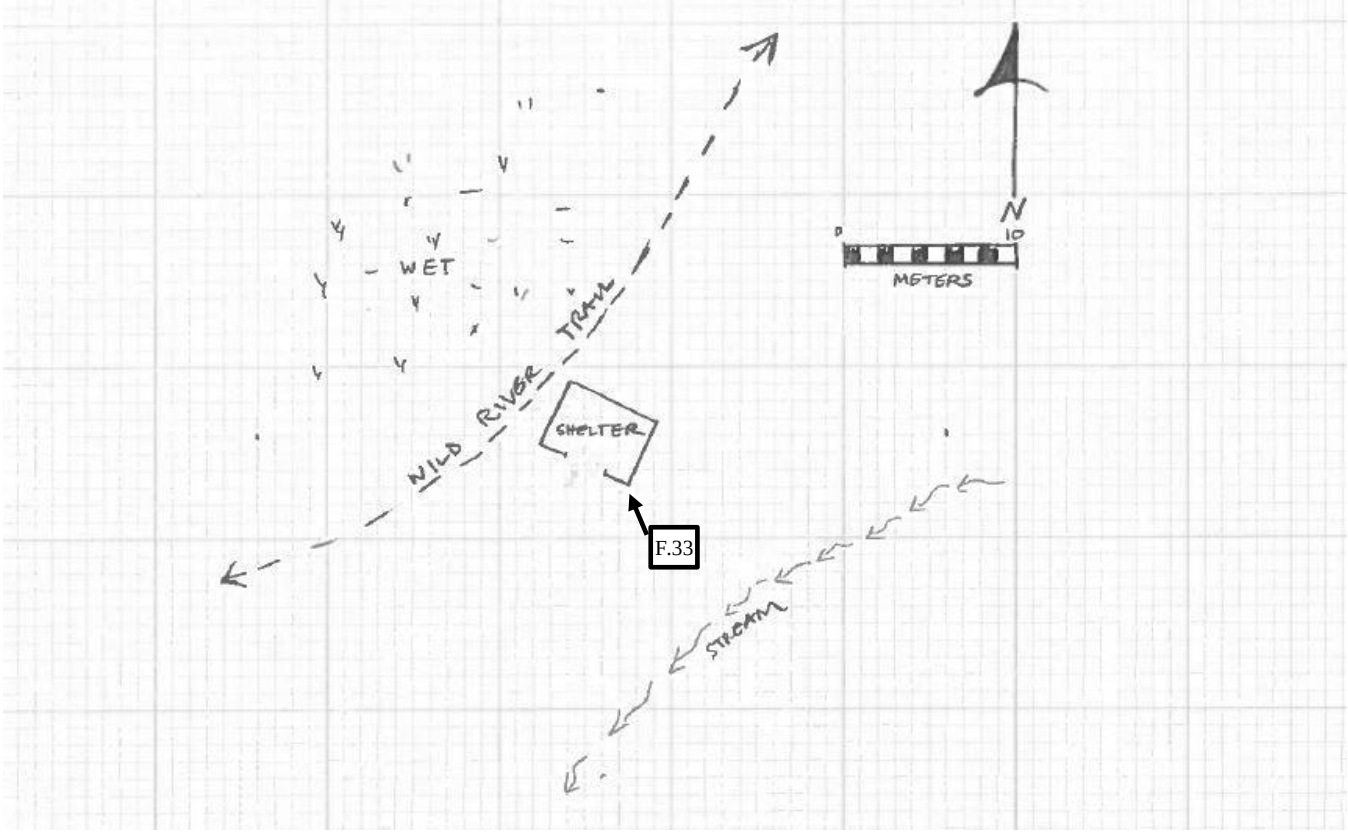


Figure 32. Perkins Notch shelter sketch map.

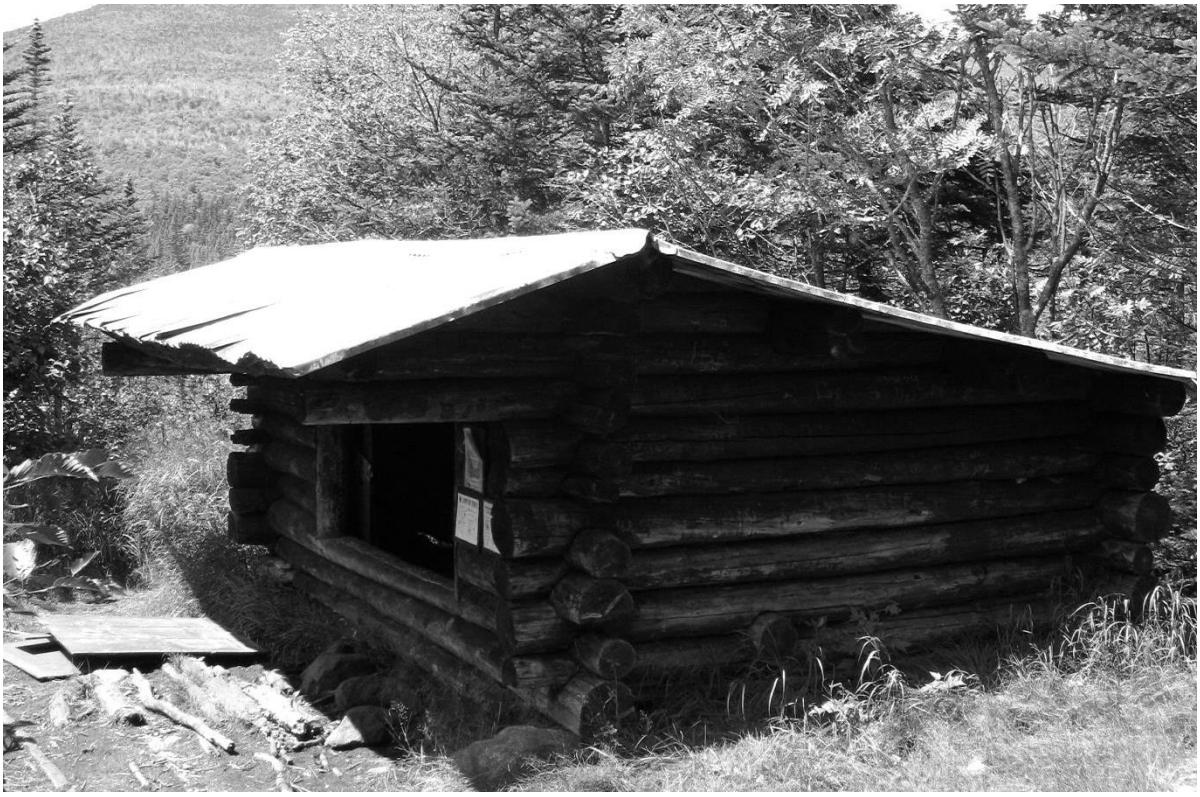


Figure 33. Perkins Notch shelter. View NW. July 27, 2011.

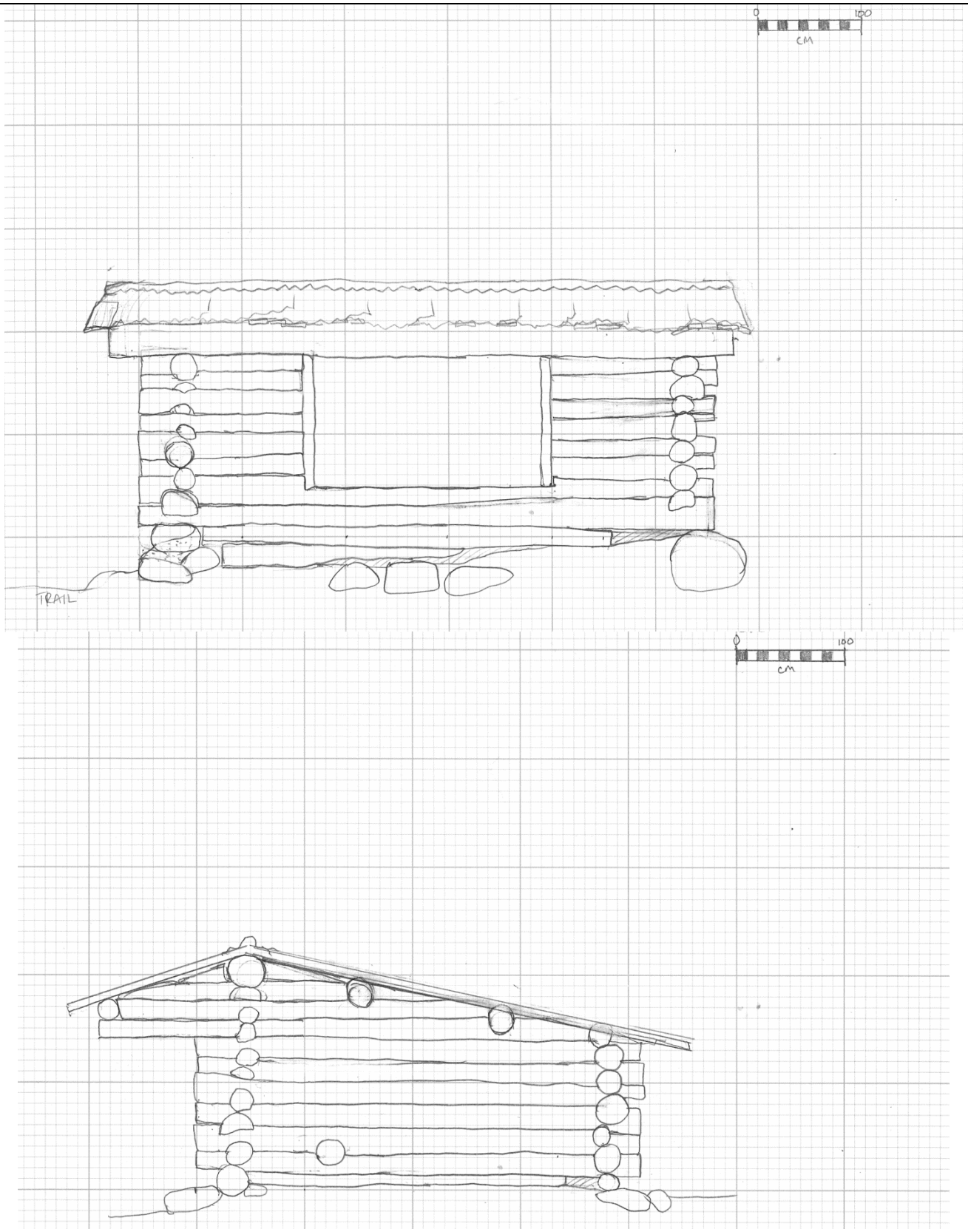


Figure 34. Perkins Notch shelter drawings. Above: Southwest (front) elevation. Below: Southeast side elevation. July 27, 2011.

Figure 35. Example of *Gabled, c.1940* shelter style. Isolation shelter. Photo from Roenke 1991: Figure 12.

Figure 36. Example of *Dartmouth Outing Club-Large Overhang* style shelter. "Dartmouth Outing Club 'Webster Cliff Shelter' or 'Wauchipauka Pond Shelter' on Webster Cliff Mountain, Warren, NH," August 1936. USFS photo. WMNF Negative No. 351407.

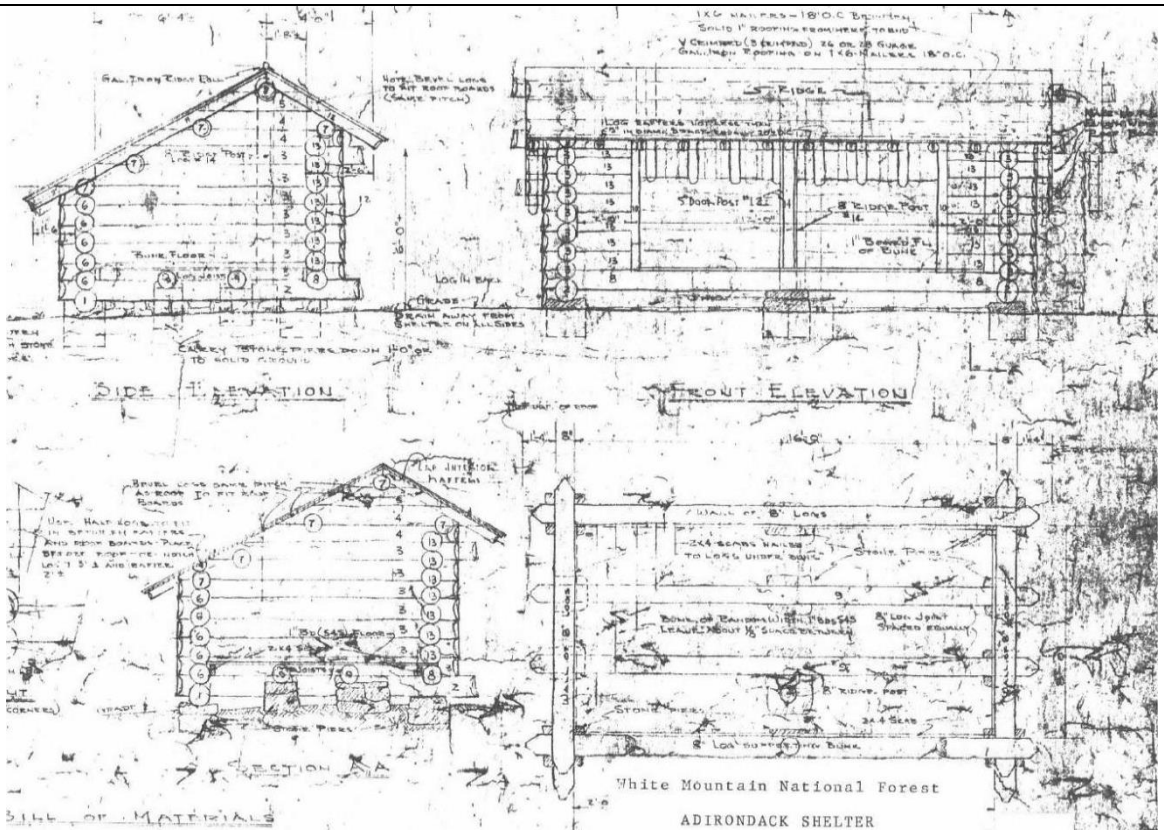


Figure 37. USDA White Mountain National Forest design titled "Adirondack Shelter" dated April 19, 1958.

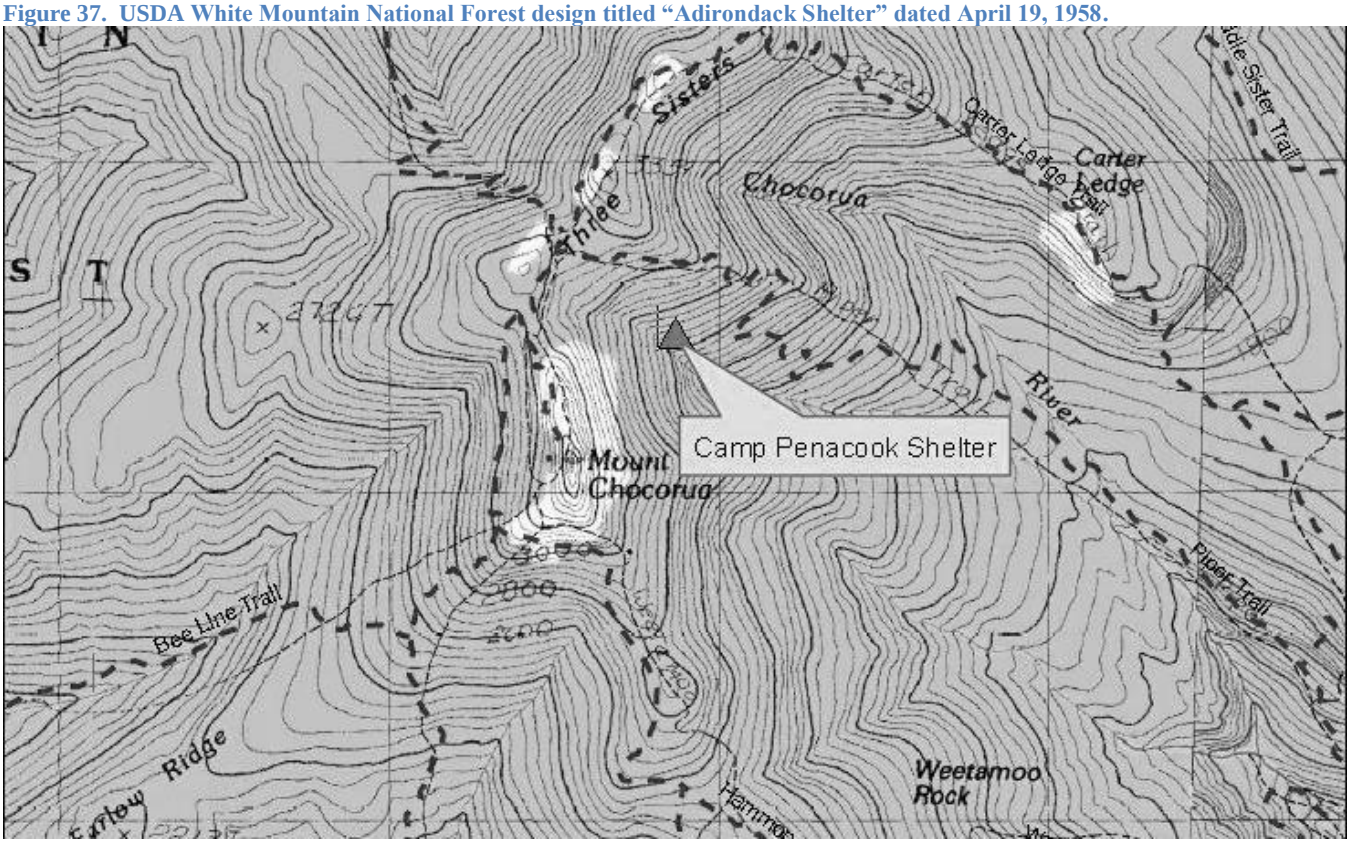


Figure 38. Camp Penacook shelter location map. USGS 7.5' Mt. Chocorua Quadrangle.

Figure 39. The first Camp Penacook, c.1930, a *Log Shed* style shelter built in 1916 by the Chocorua Mountain Club. Lantern slide by A.C. Comey in the collection of the Appalachian Mountain Club Archives, 5 Joy Street, Boston, MA. Call No. LS 57.59.

Figure 40. Camp Penacook shelter. View NE. July 20, 2011.

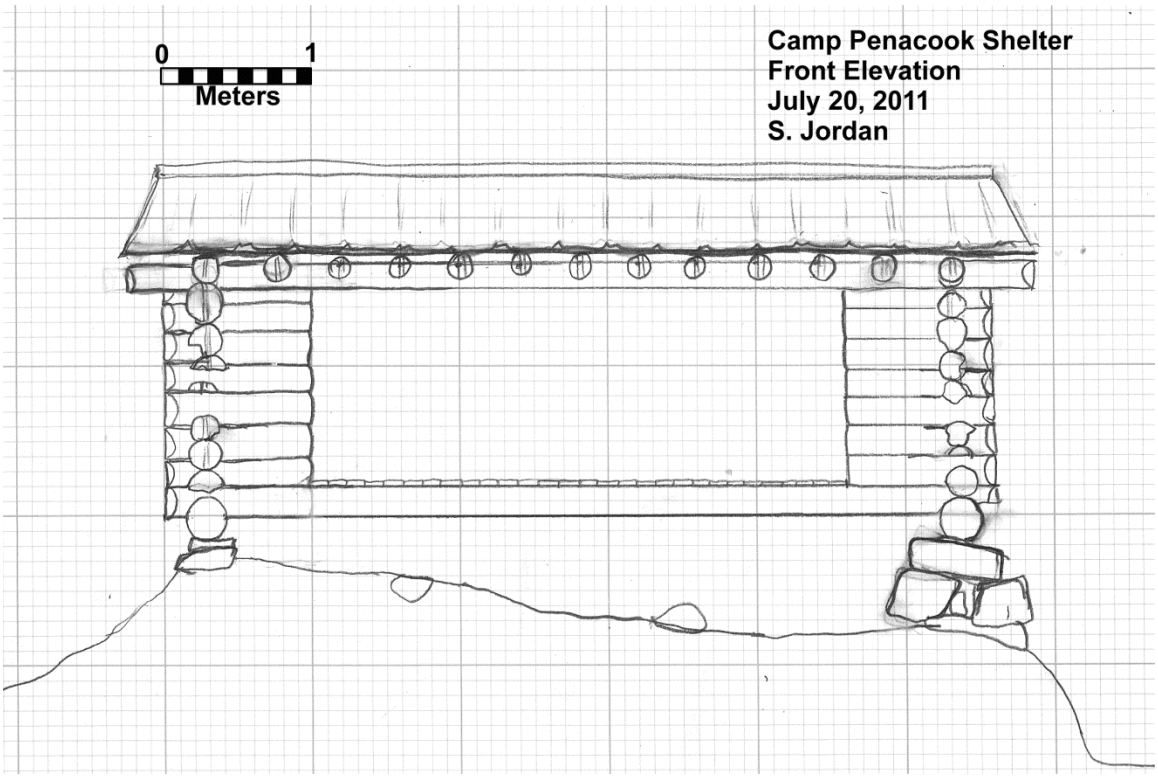


Figure 41. Camp Penacook shelter drawing. Southeast (front) elevation. July 20, 2011.

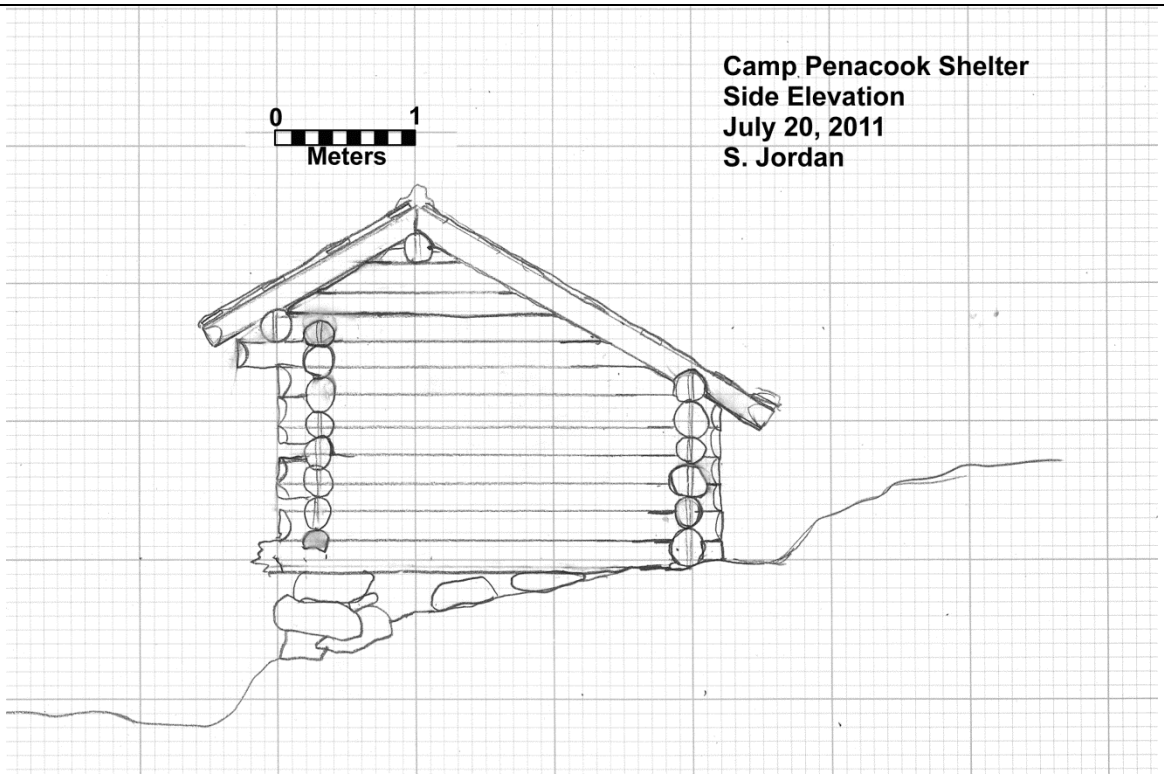


Figure 42. Camp Penacook shelter drawing. Northeast (side) elevation. July 20, 2011.

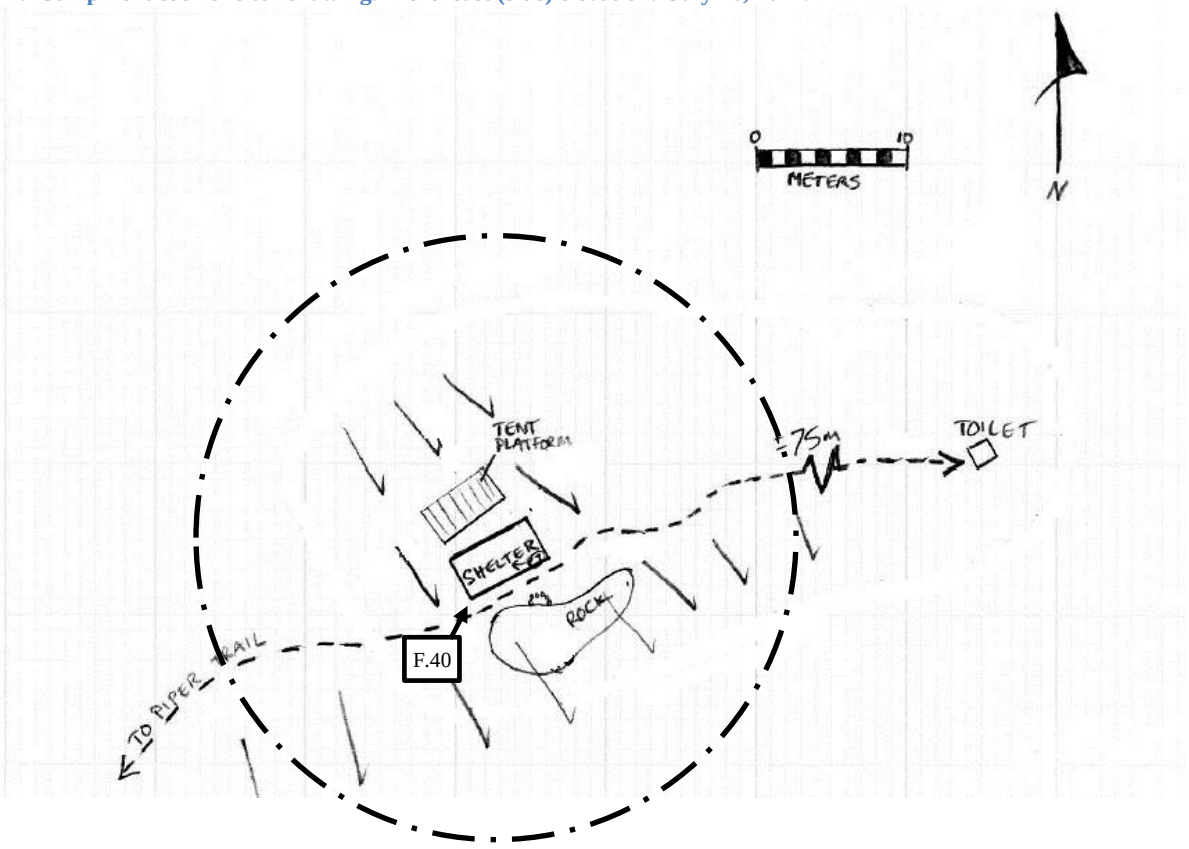


Figure 43. Camp Penacook shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

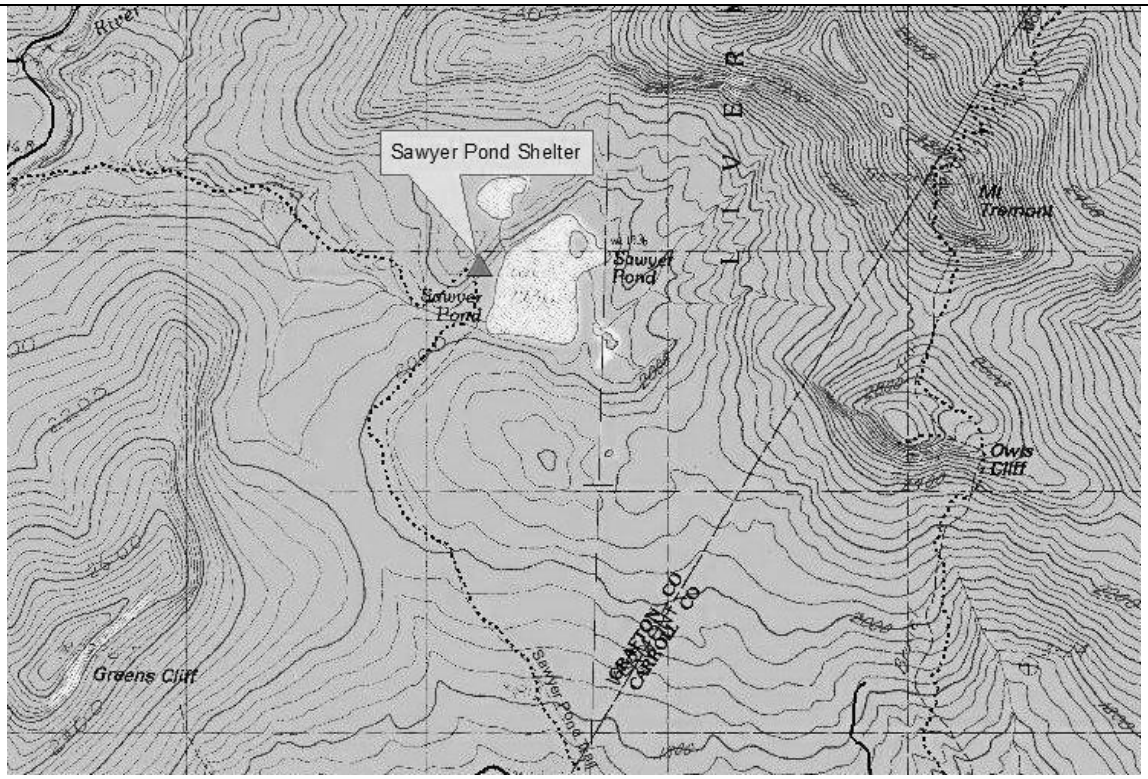


Figure 44. Sawyer Pond shelter location map. USGS 7.5' Mt. Carrigain Quadrangle.

Figure 45. Sawyer Pond shelter. "Adirondack shelter under construction at Sawyer Pond for the use of fishermen, hunters and hikers," August 1958. WMNF Negative No. 487793.

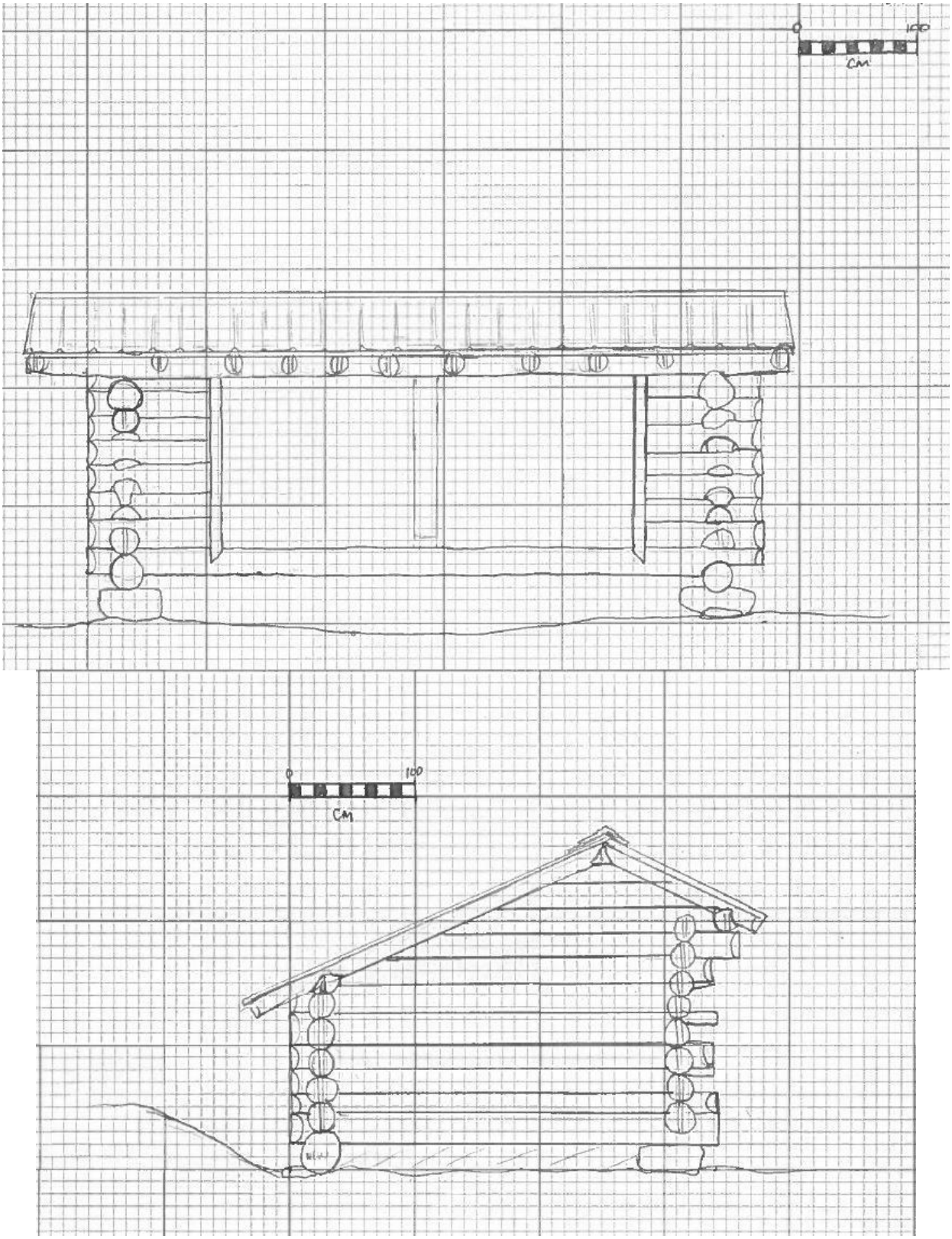


Figure 46. Sawyer Pond shelter drawings. Above: East (front) elevation. Below: South side elevation. November 9, 2011.

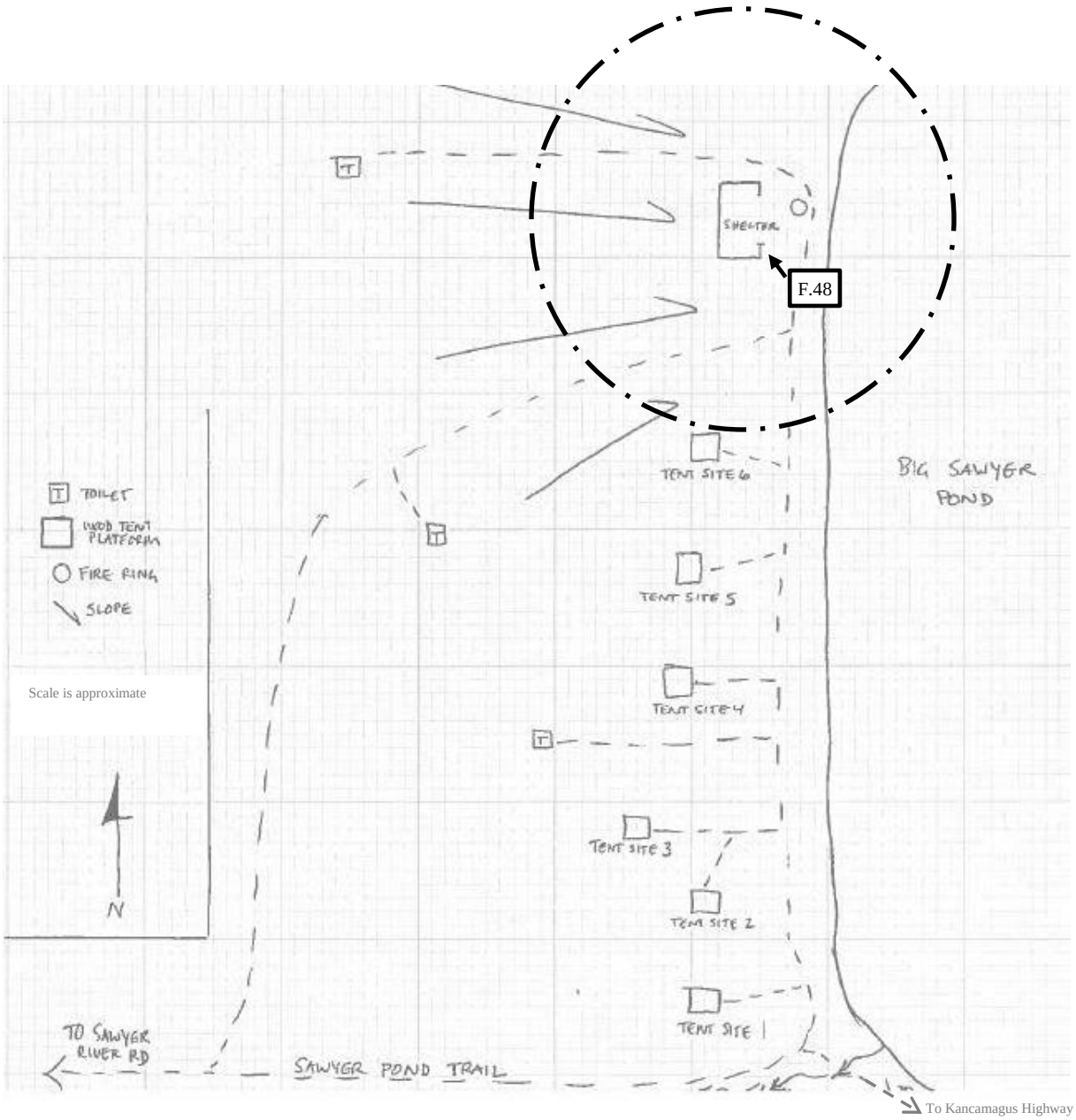


Figure 47. Sawyer Pond shelter and campsite sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

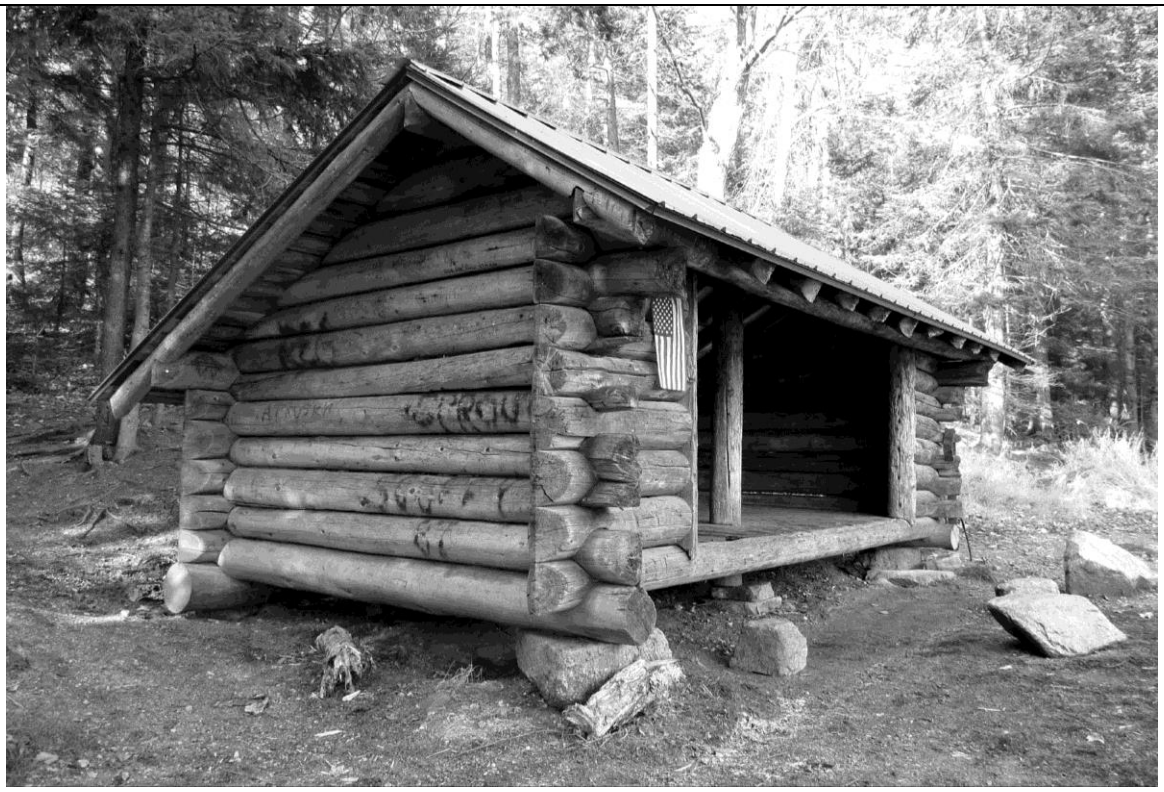


Figure 48. Sawyer Pond shelter. View NW. November 9, 2011.

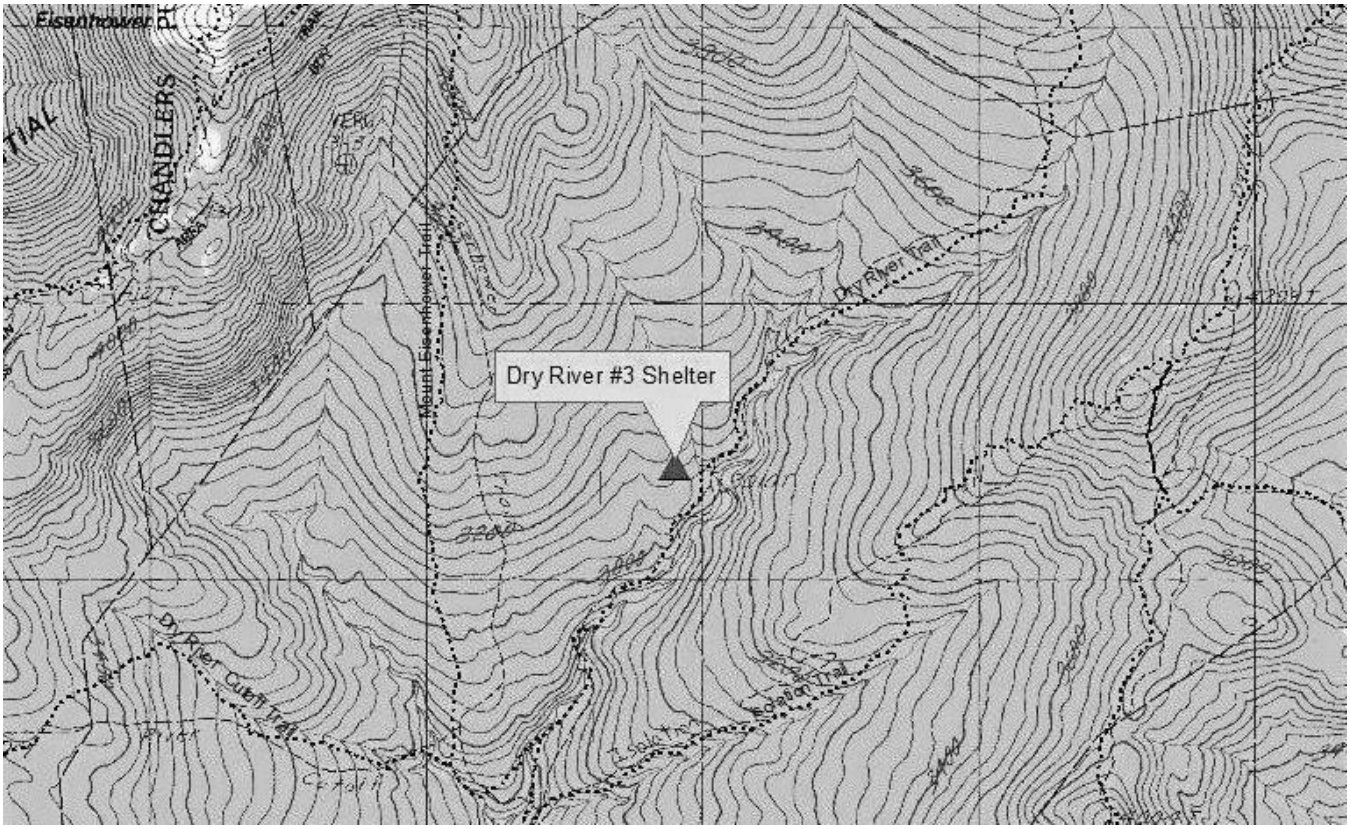


Figure 49. Dry River No.3 shelter location map. USGS 7.5' Stairs Mountain Quadrangle.

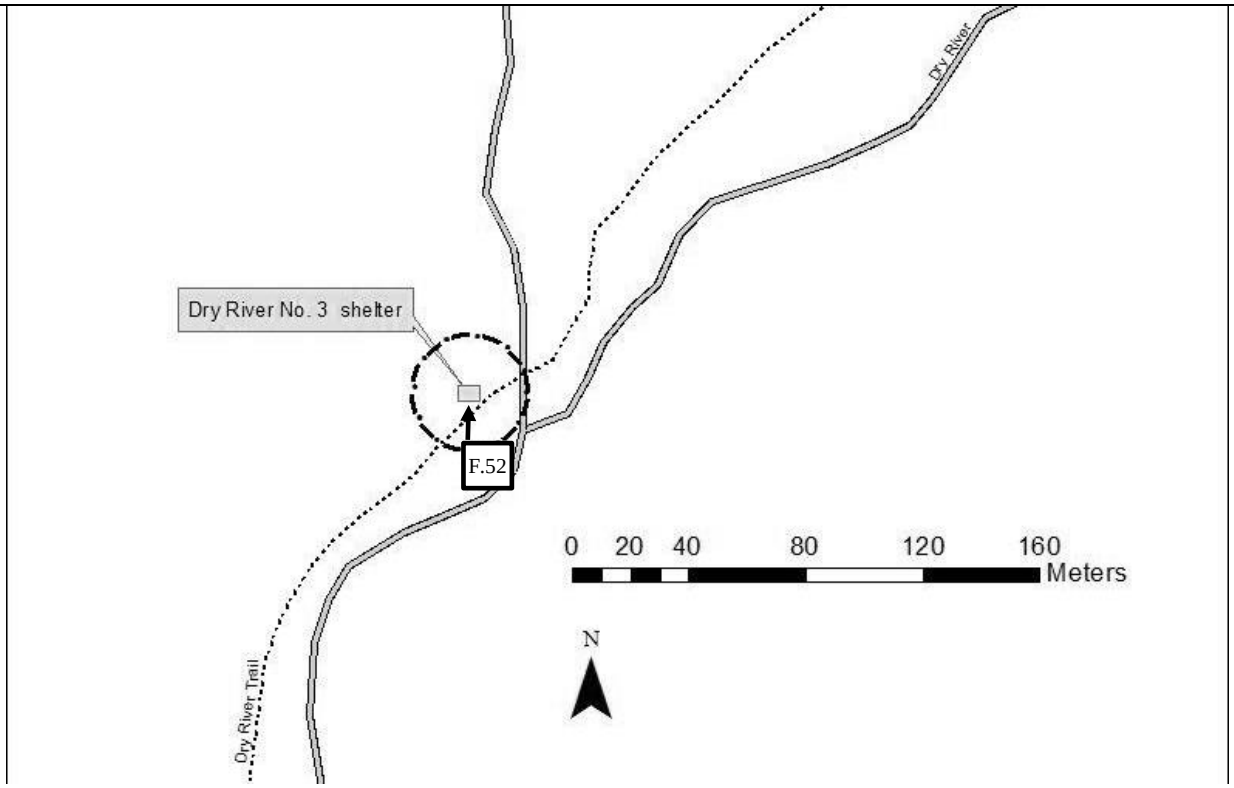


Figure 50. Dry River No.3 shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

Figure 51. Dry River No.3 shelter, 1967. Photo from Roenke 1991, Figure 5.

Figure 52. Dry River No.3 shelter. View N. WMNF photo. May 29, 2011.

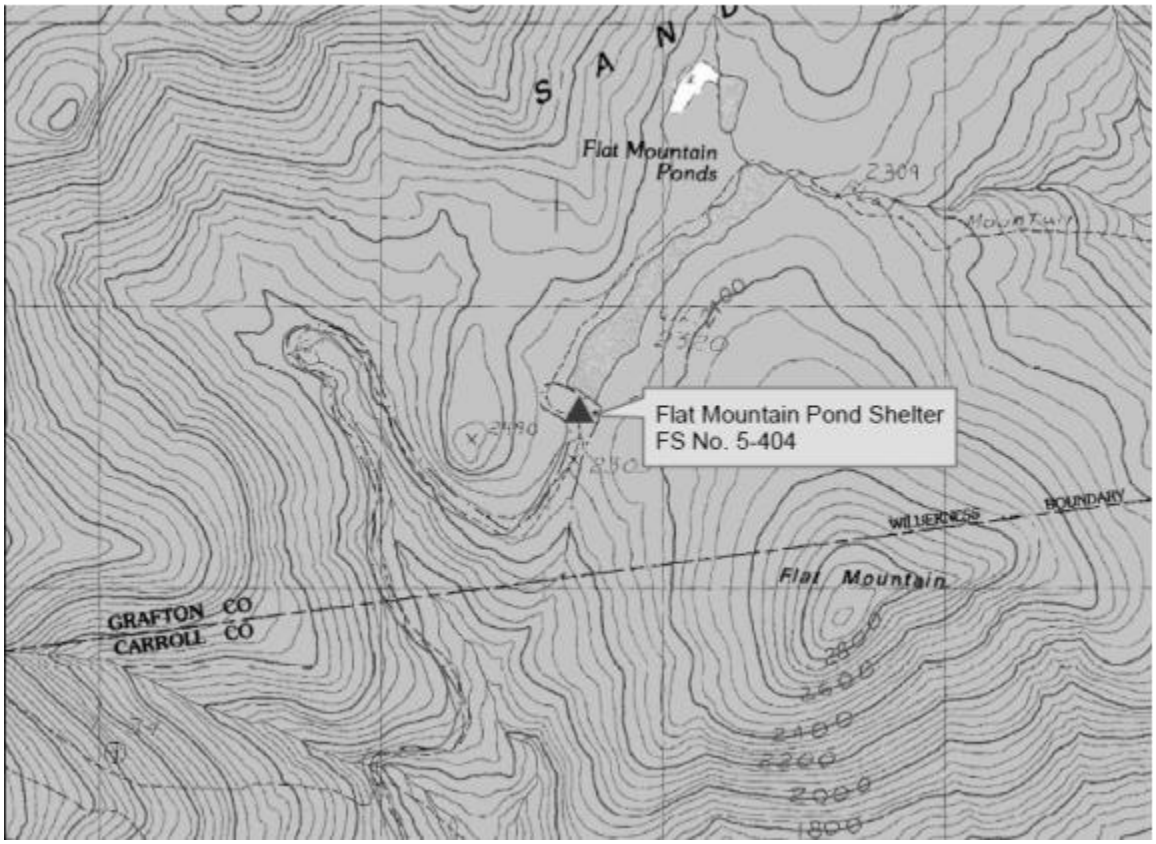


Figure 53. Flat Mountain Pond shelter location map. USGS 7.5' Mt. Tripyramid Quadrangle.

Figure 54. Flat Mountain Pond shelter, prior to 1920. Appalachia Journal Vol. XXVII(4): 521.

Figure 55. Flat Mountain Pond shelter. View SW. August 10, 2011.

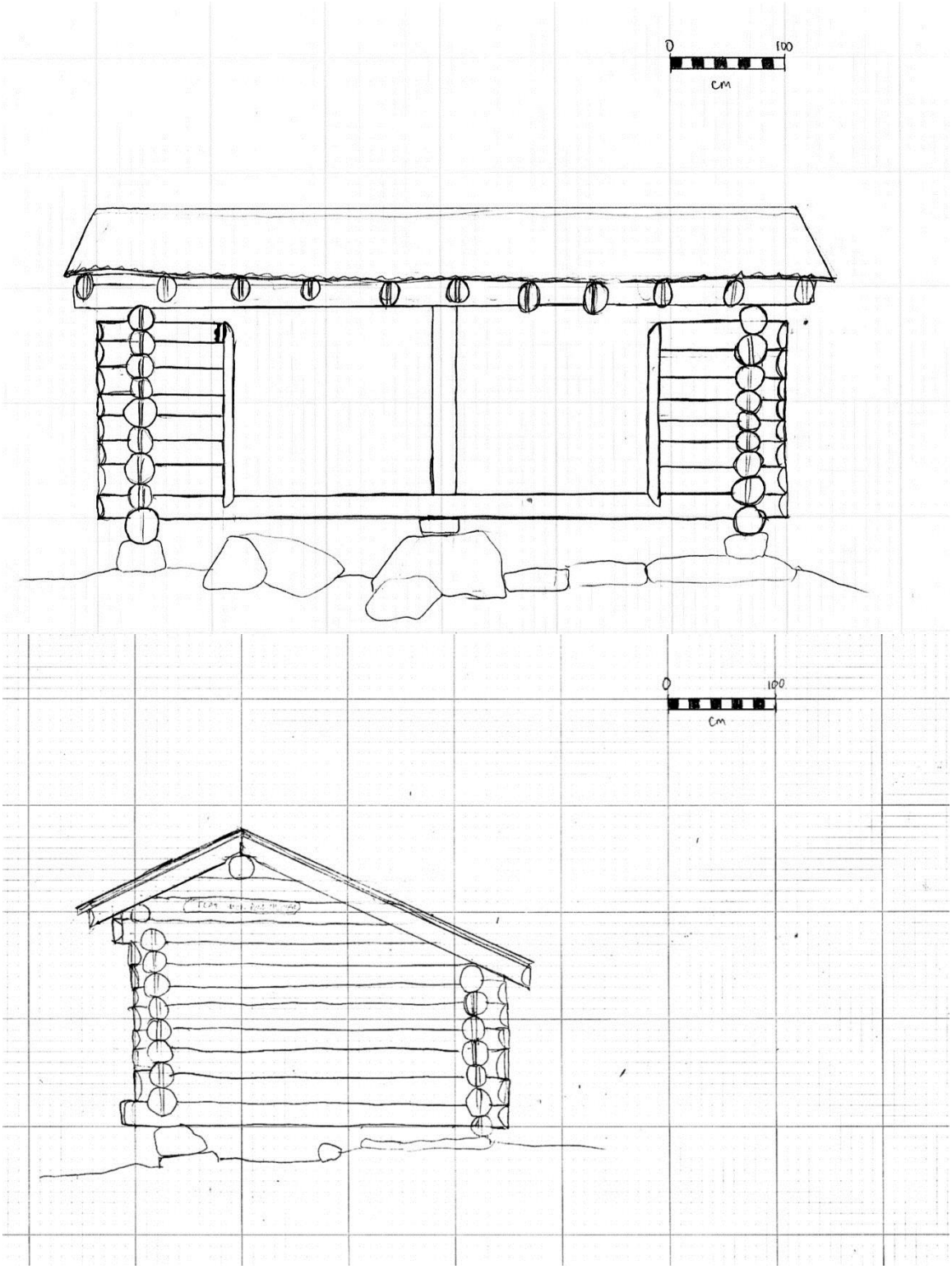


Figure 56. Flat Mountain Pond shelter drawings. Above: East (front) elevation. Below: North side elevation. August 10, 2011.

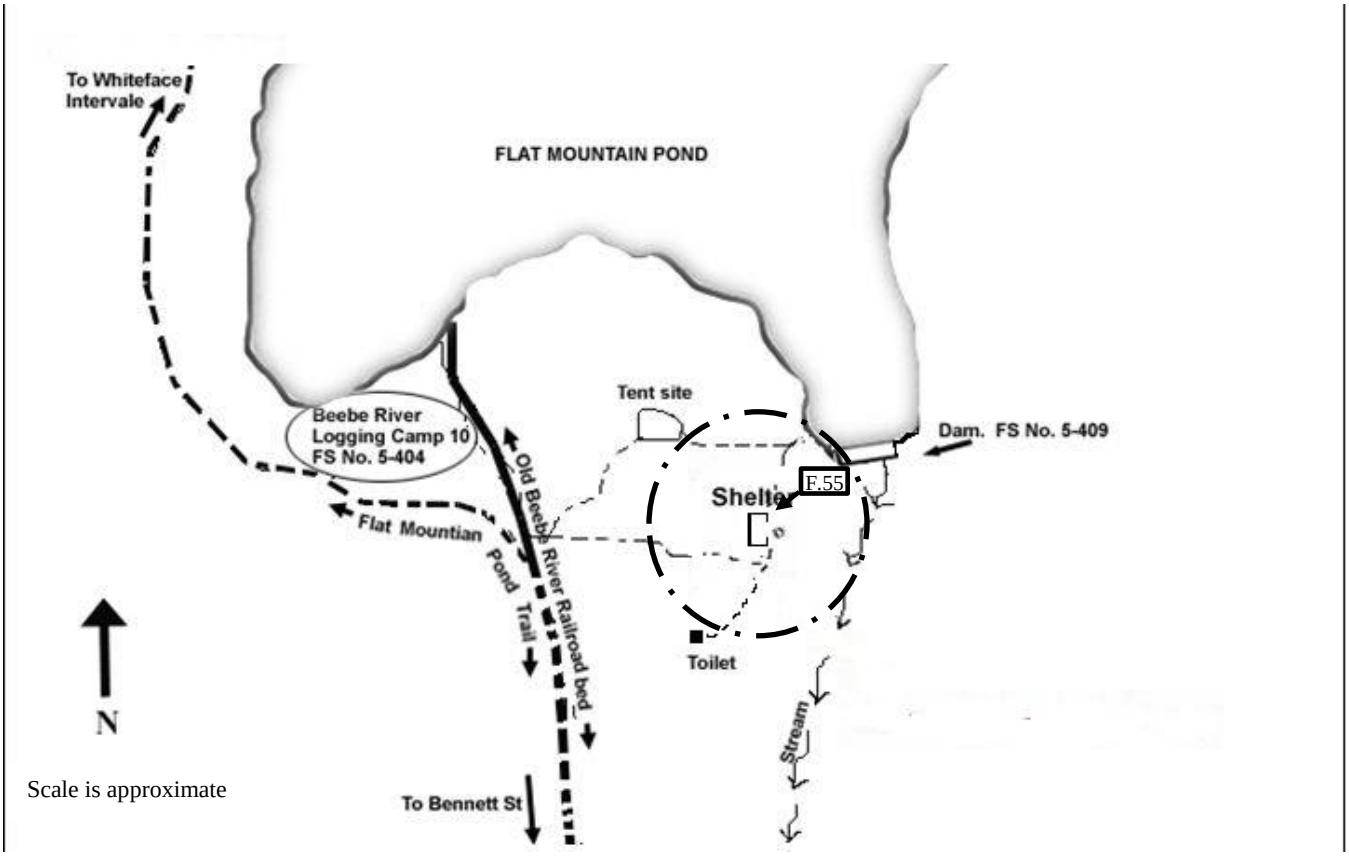


Figure 57. Flat Mountain Pond shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

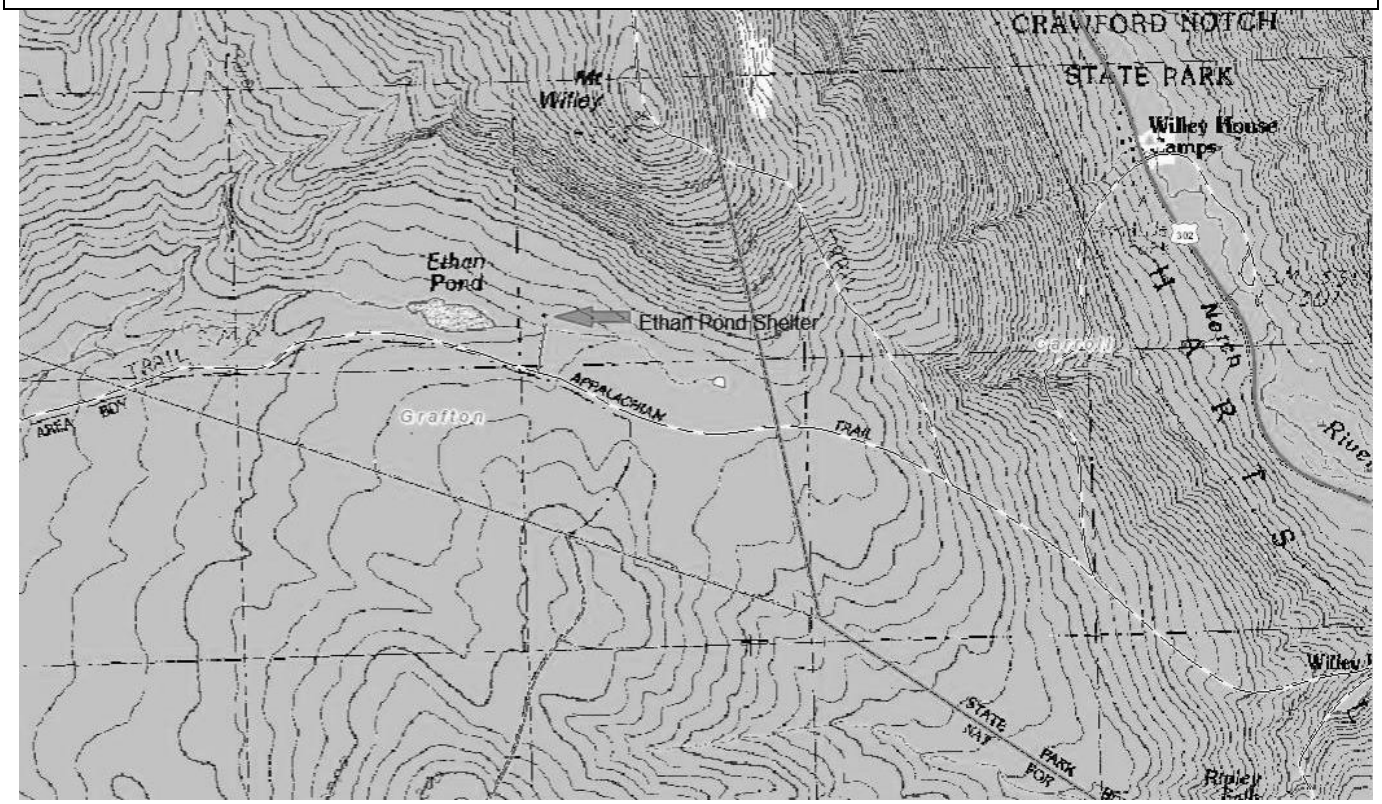


Figure 58. Ethan Pond shelter location map. USGS 7.5' Crawford Notch Quadrangle.

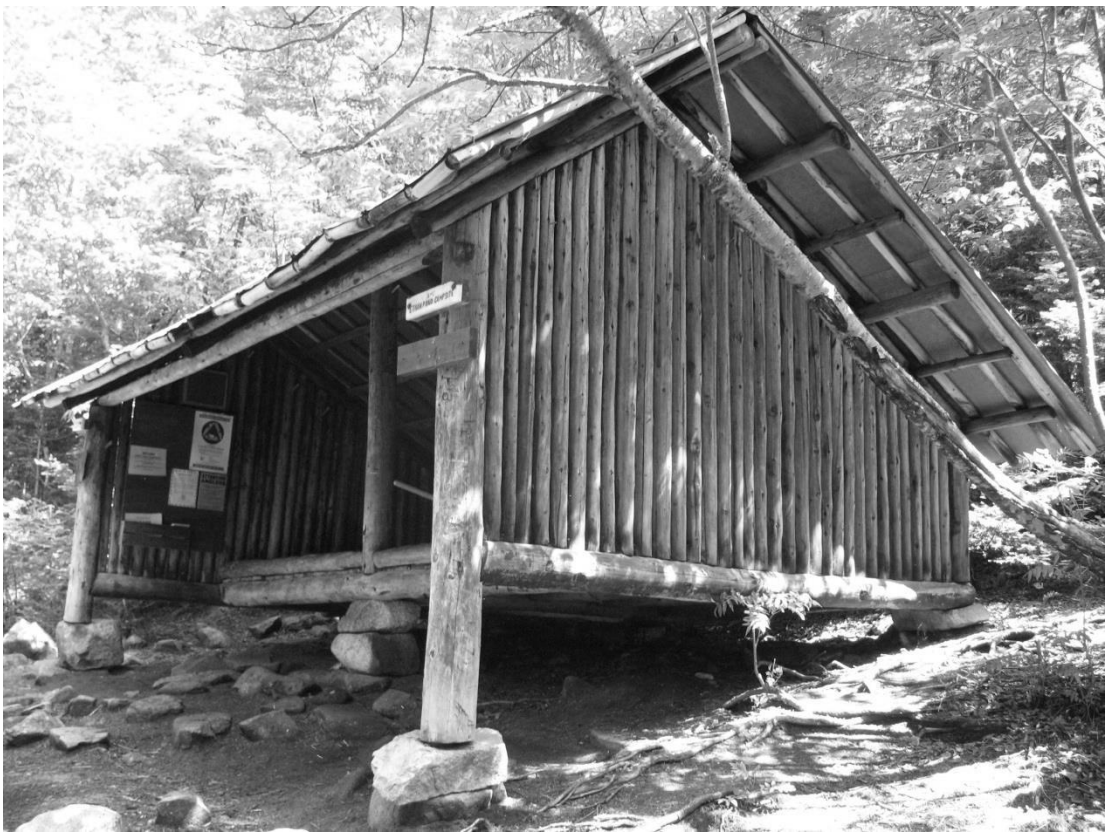


Figure 59. Ethan Pond shelter. View NE. June 16, 2011.

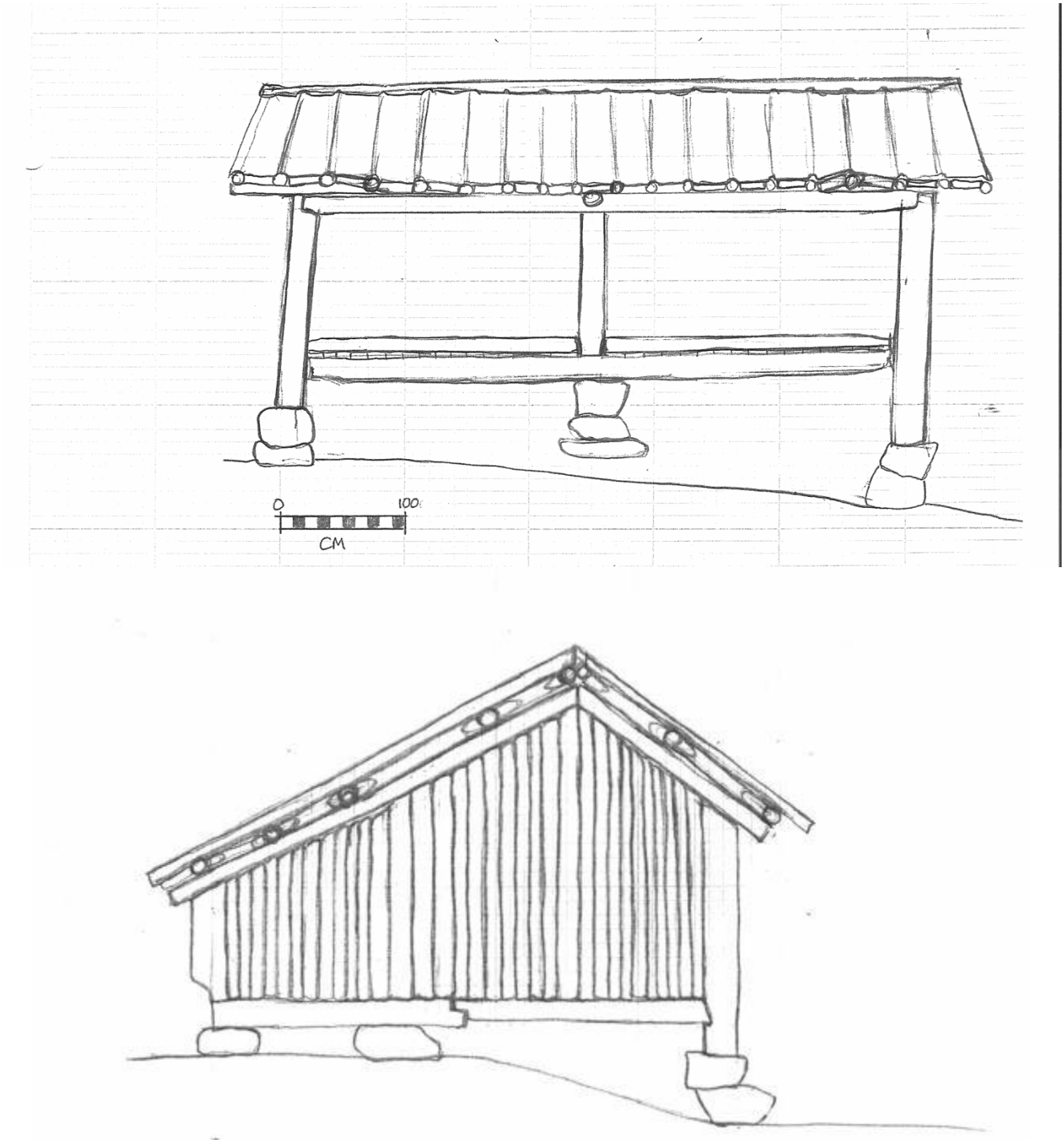


Figure 60. Ethan Pond shelter. Above: West (front) façade. Below: North side elevation. June 16, 2011.

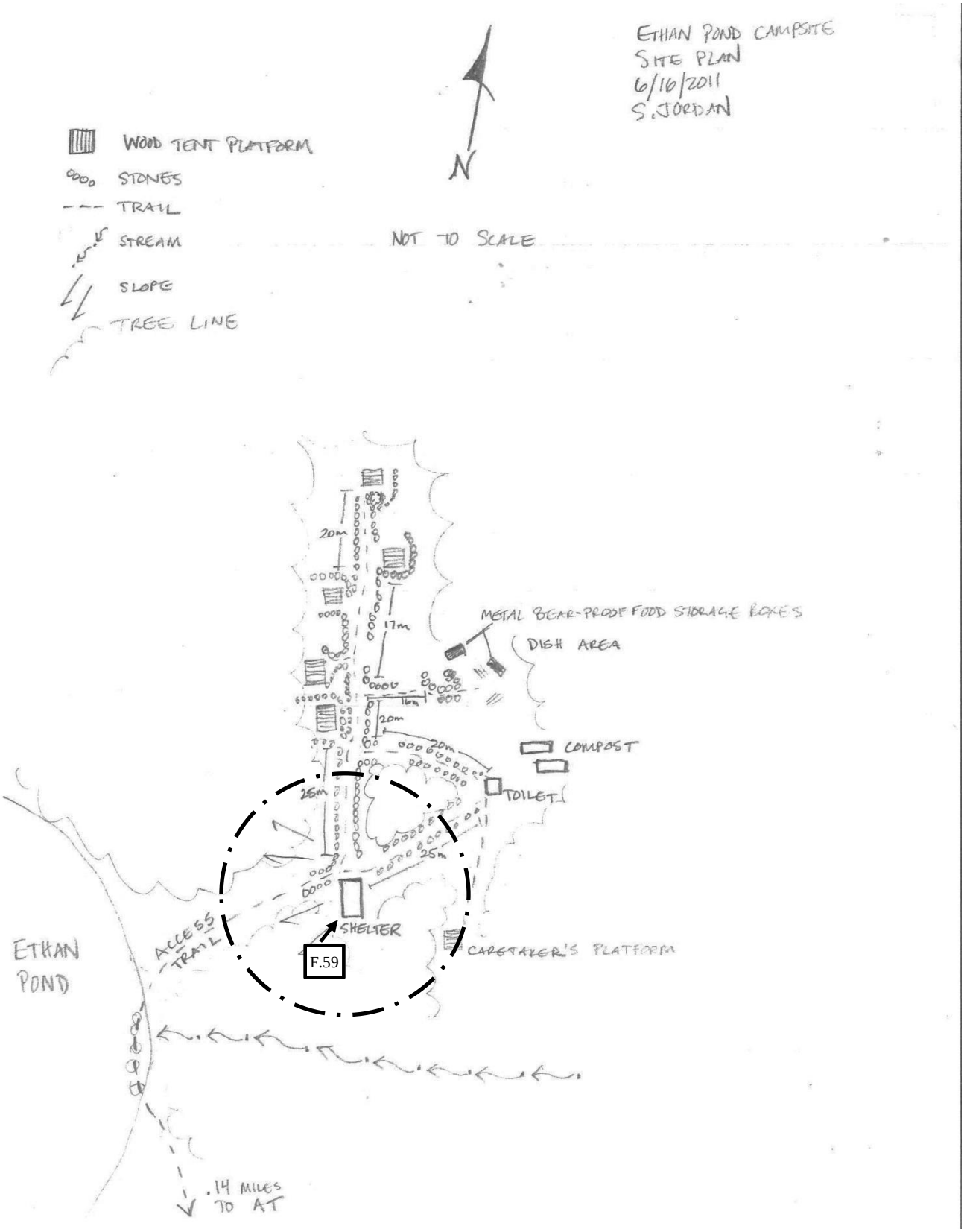


Figure 61. Ethan Pond shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

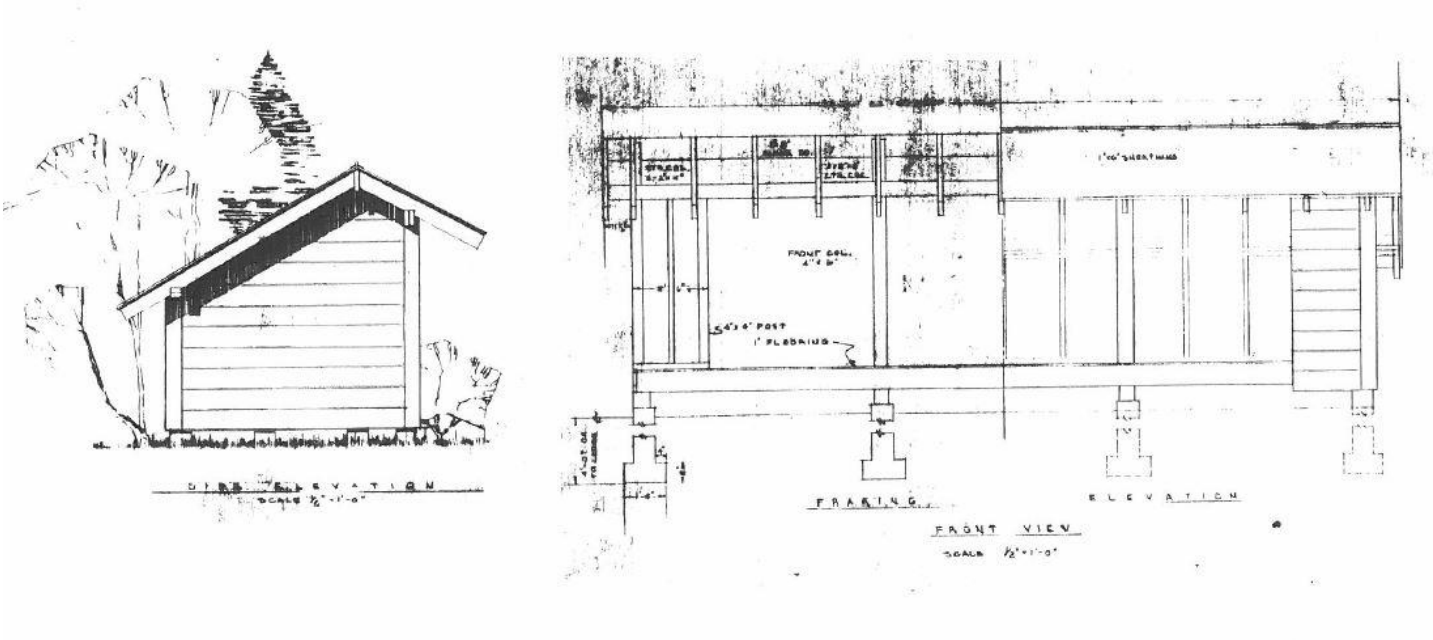


Figure 62. Details of side and front elevations from "24 Ft Adirondack Shelter, 8-Man," FS Drawing No. 7300-60050, 1965.

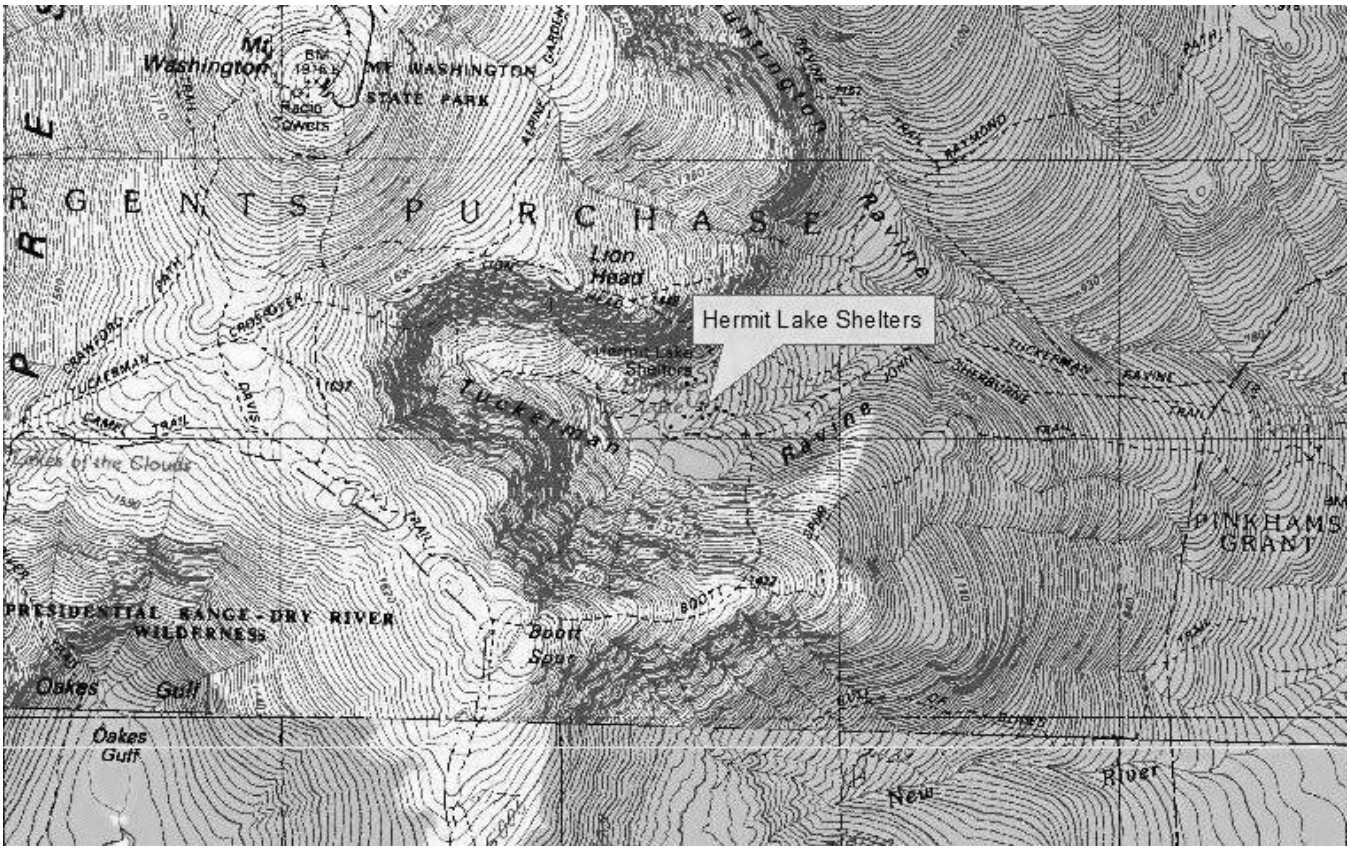


Figure 63. Hermit Lake shelters location map. USGS 7.5' Mount Washington Quadrangle.

Figure 64. *Birch Bark* style AMC shelter at Hermit Lake, c.1910. Guy Shorey Postcard.

Figure 65. "Tuckerman Ravine, Hermit Lake and Shelter." July 11, 1939. This shelter, known as "Hermit Lake B" or "No. 2" stood from 1929-1960. WMNF photo Negative No. 351372.

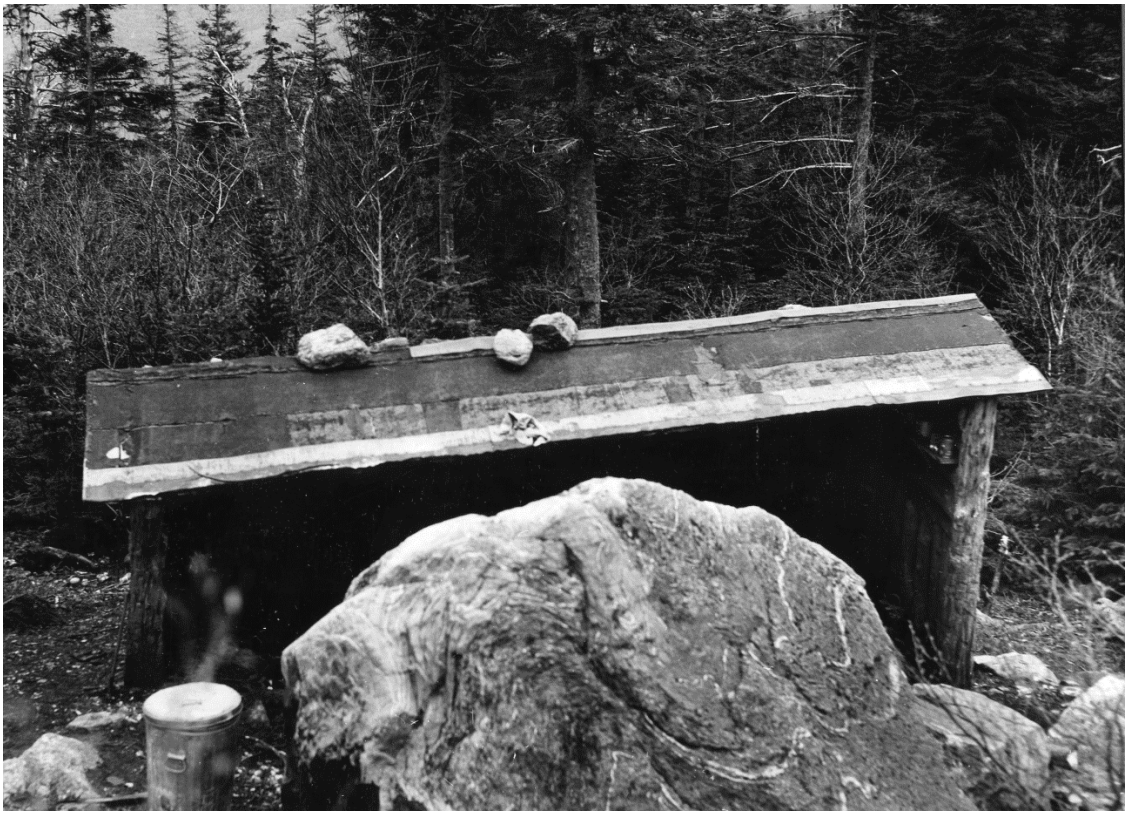


Figure 66. "Shelter 'A' at Hermit Lake in need of replacement." May 1959. This shelter, also known as "Hermit Lake No. 1," stood from 1921 to 1960 (See Figure 5). WMNF historic photo collection, Negative No. 493649.

Figure 67. Hermit Lake No. 5 shelter, 1968. Forest Service photo published in Appalachia Journal Vol. XXXVII(1): 142.

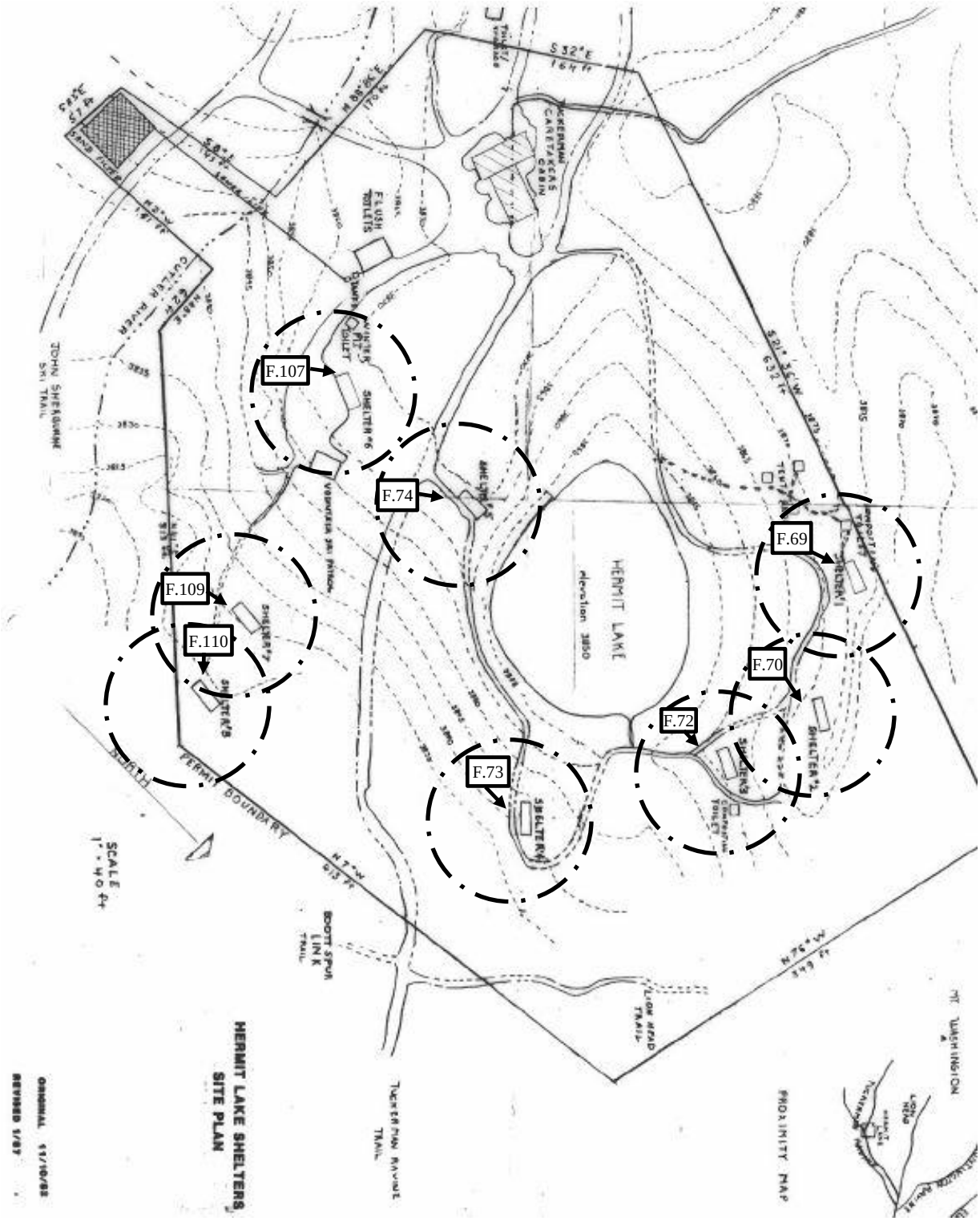


Figure 68. Hermit Lake shelters site plan, 1/1987. The above map reflects structures present in 2015. Dashed circles indicate approximate location of 20m radius shelter site boundaries. Map located in Hermit Lake file in WMNF Supervisor's Office central files, Campton, NH.

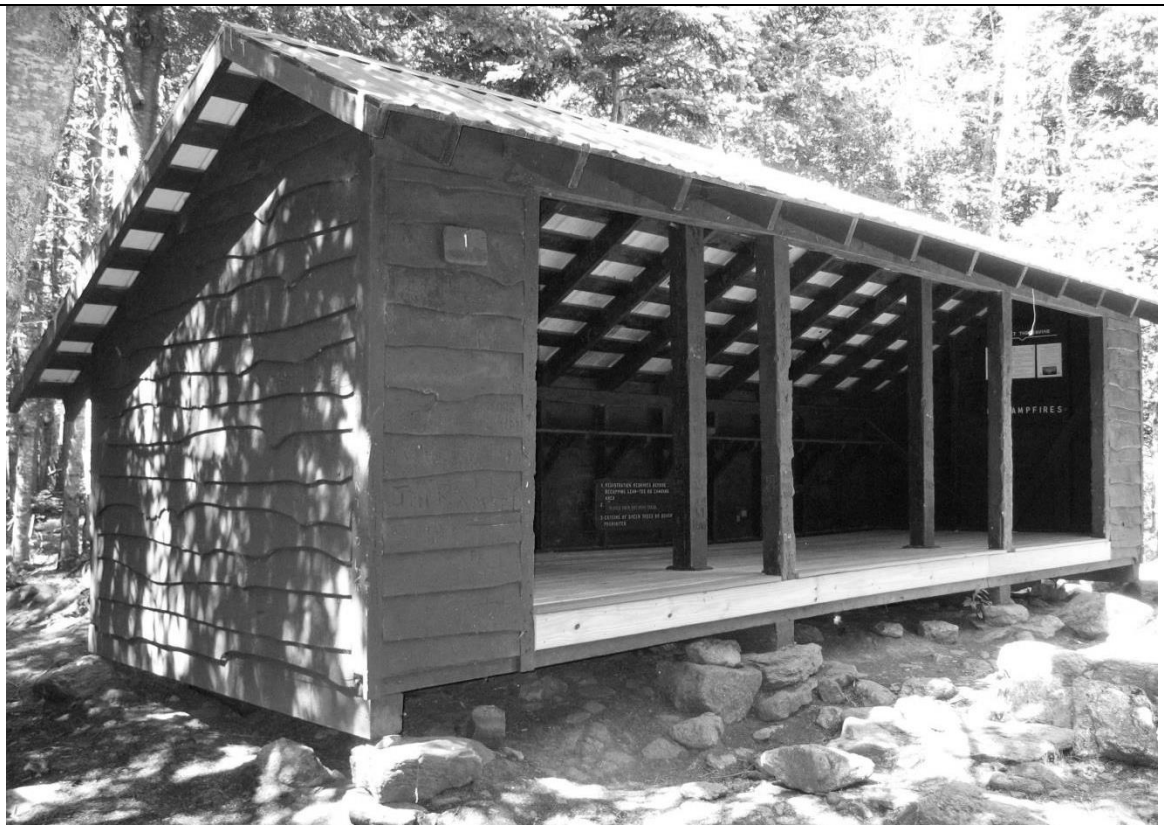


Figure 69. Hermit Lake No. 1 shelter. View NW. August 7, 2011.

Figure 70. Hermit Lake No. 2 shelter. View N. August 7, 2011.

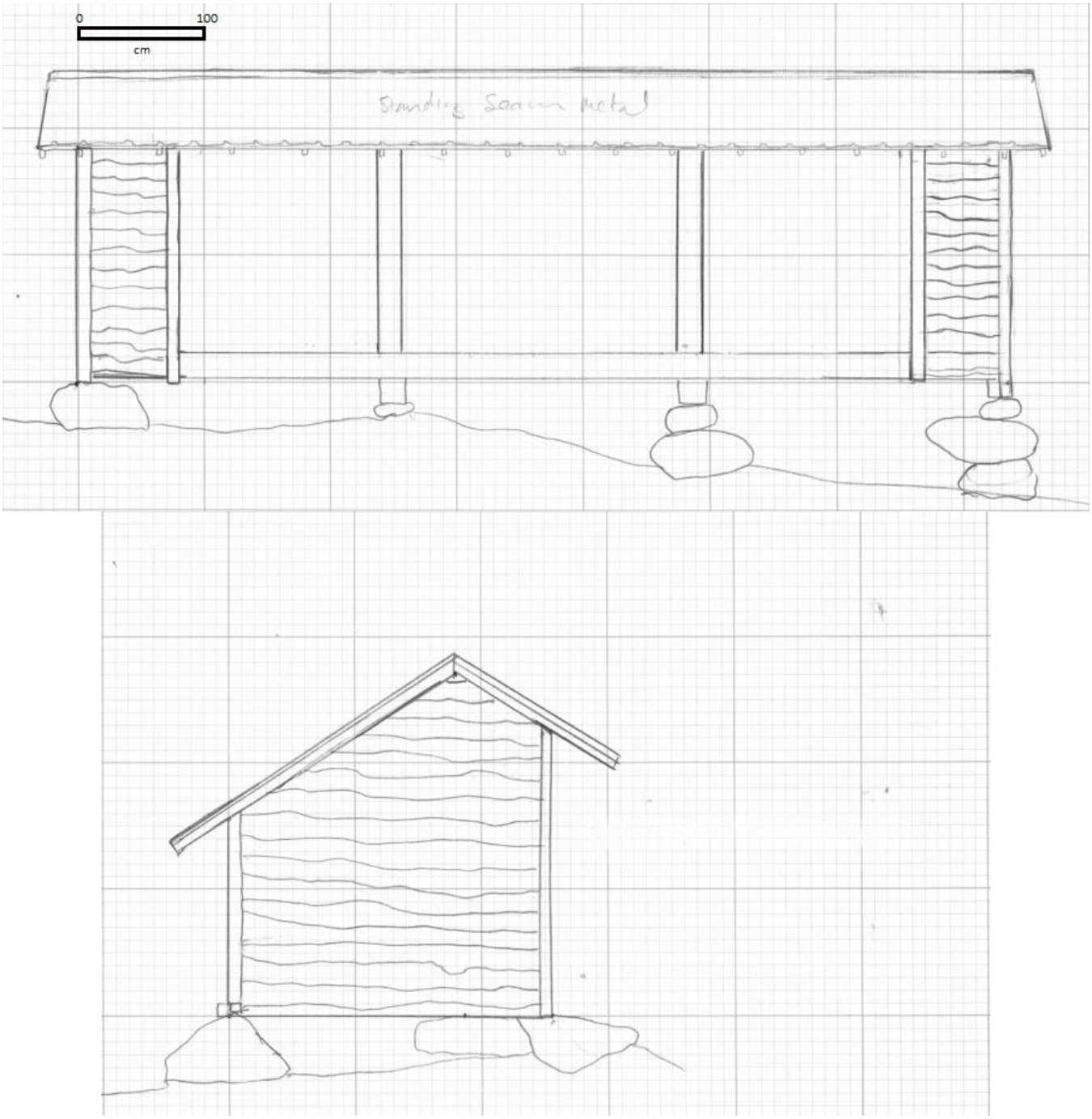


Figure 71. Hermit Lake No. 2 shelter. August 7, 2011. Above: Southeast (front) elevation. Below: Southwest side elevation.

Figure 72. Hermit Lake No. 3 shelter. View N. September 9, 2002. USFS photo.

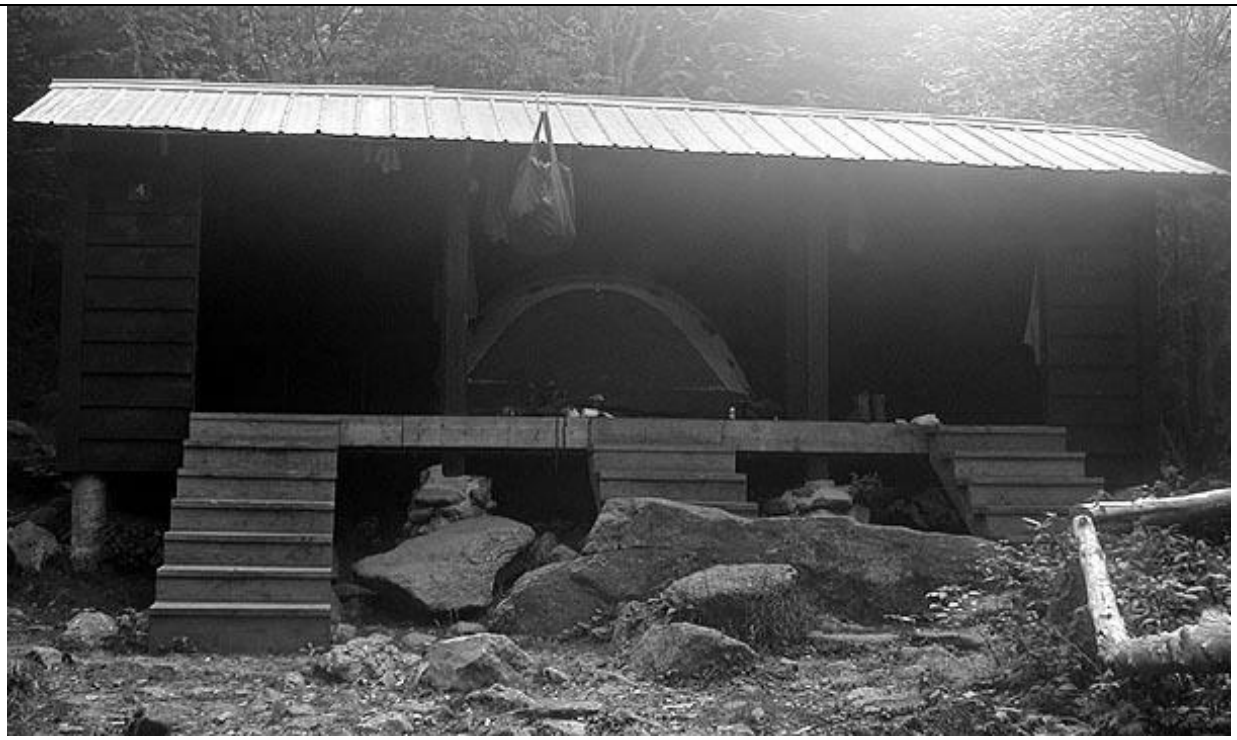


Figure 73. Hermit Lake No. 4 shelter. View N. http://hikethewhites.com/hermitlake.html, accessed 12/31/2015.

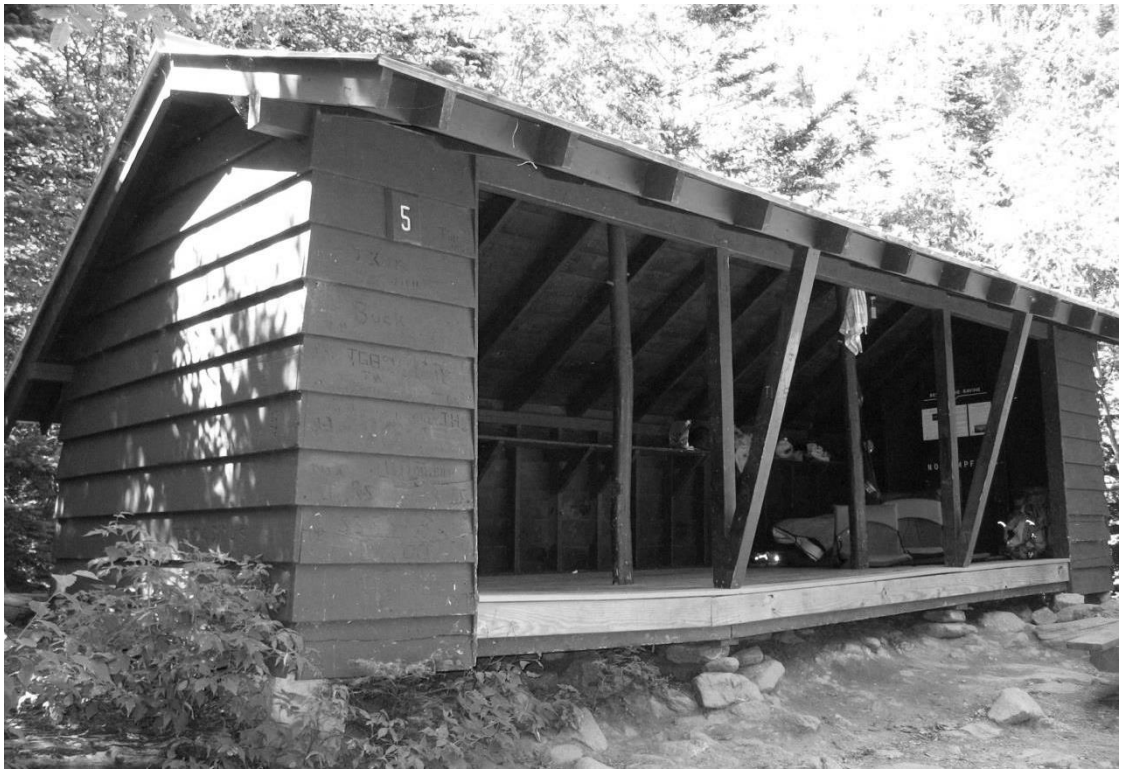


Figure 74. Hermit Lake No. 5 shelter. View NW. August 17, 2011.

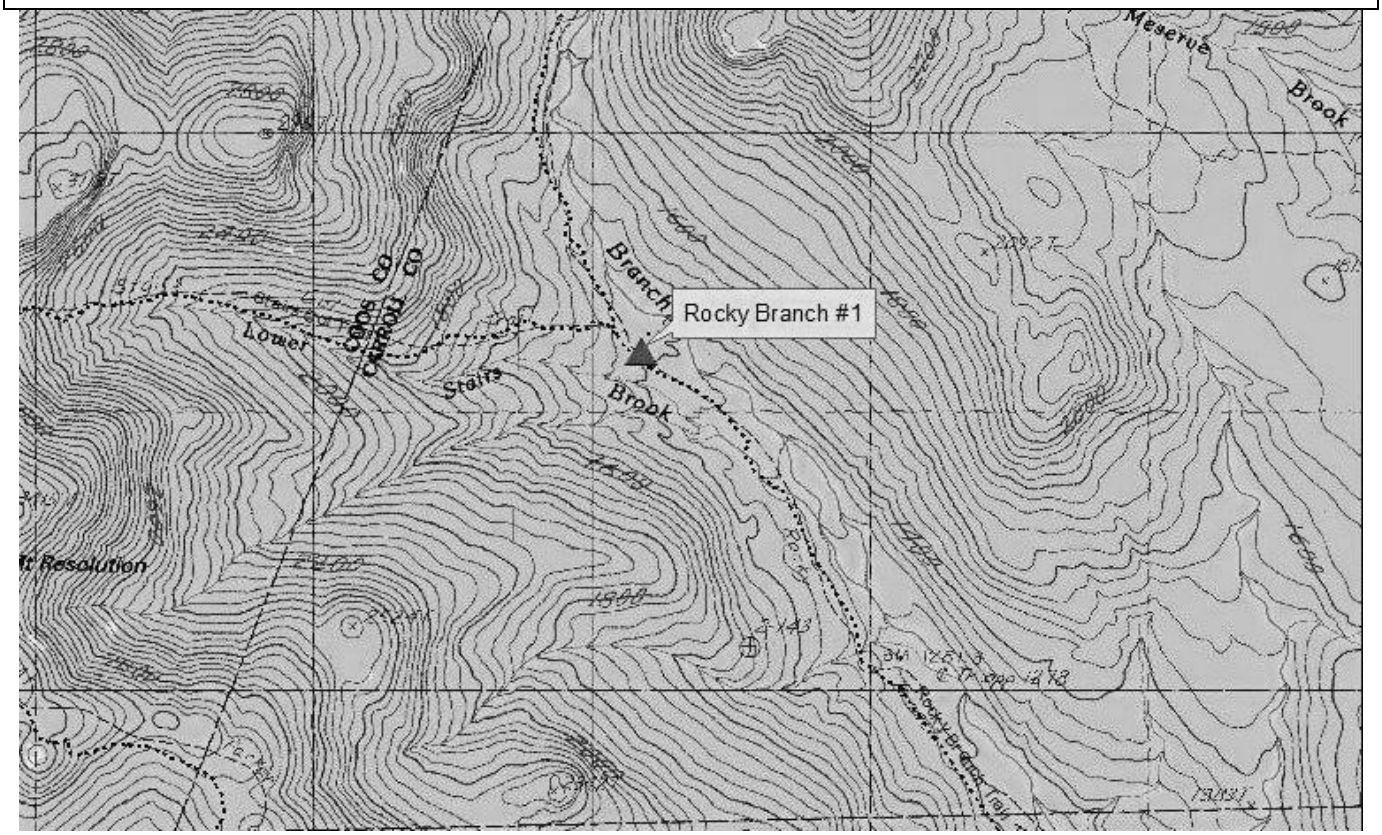


Figure 75. Rocky Branch No. 1 shelter location map. USGS 7.5' Stairs Mountain Quadrangle.

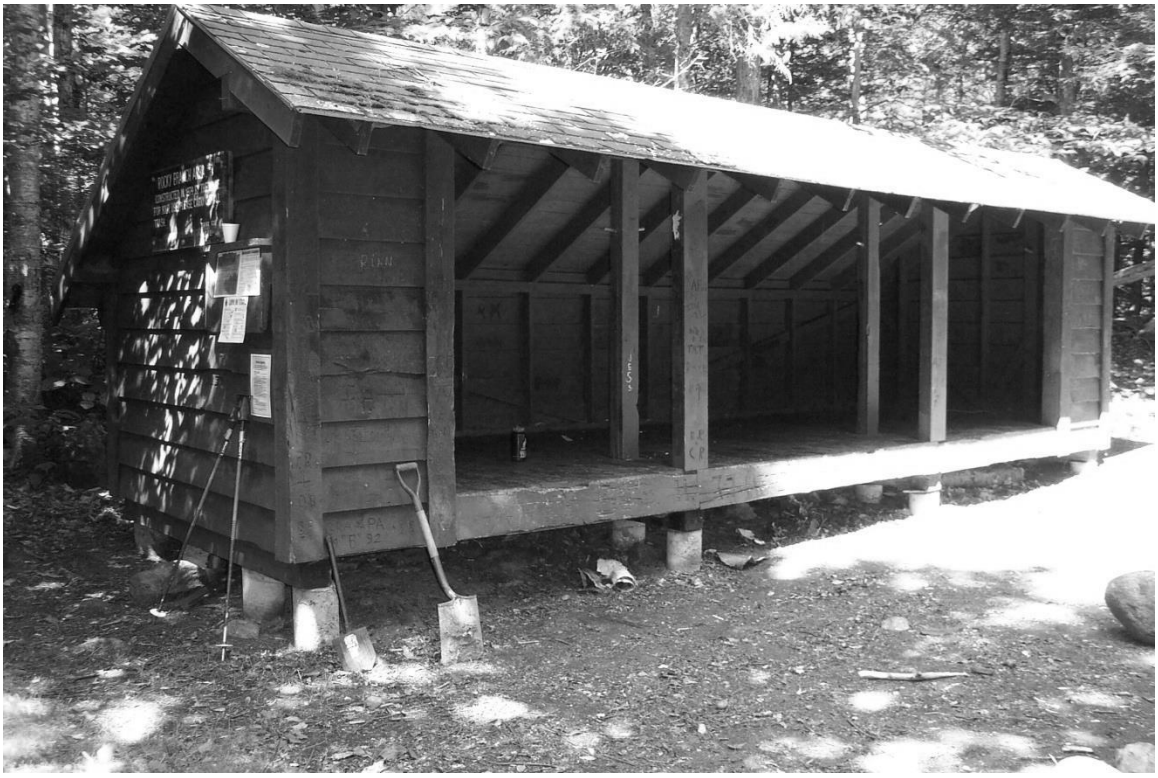


Figure 76. Rocky Branch No. 1 shelter. View NE. August 8, 2005. Photo courtesy of Susan Schibanoff.

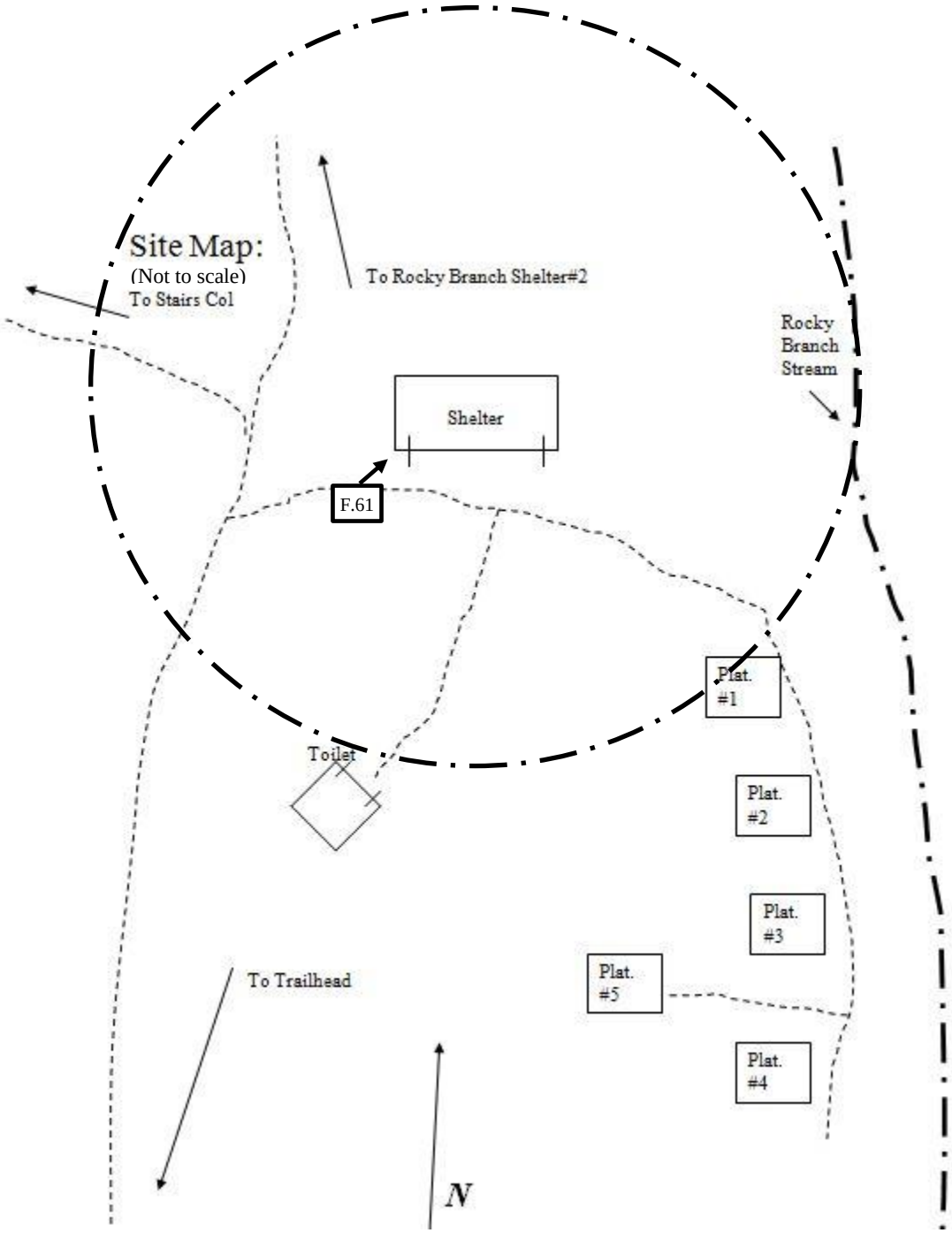


Figure 77. Rocky Branch No. 1 shelter sketch map. Map by Ralph Horack, WMNF Facilities Assessment Form, 5/23/2002. Dashed circle indicates approximate location of 20m radius site boundary.

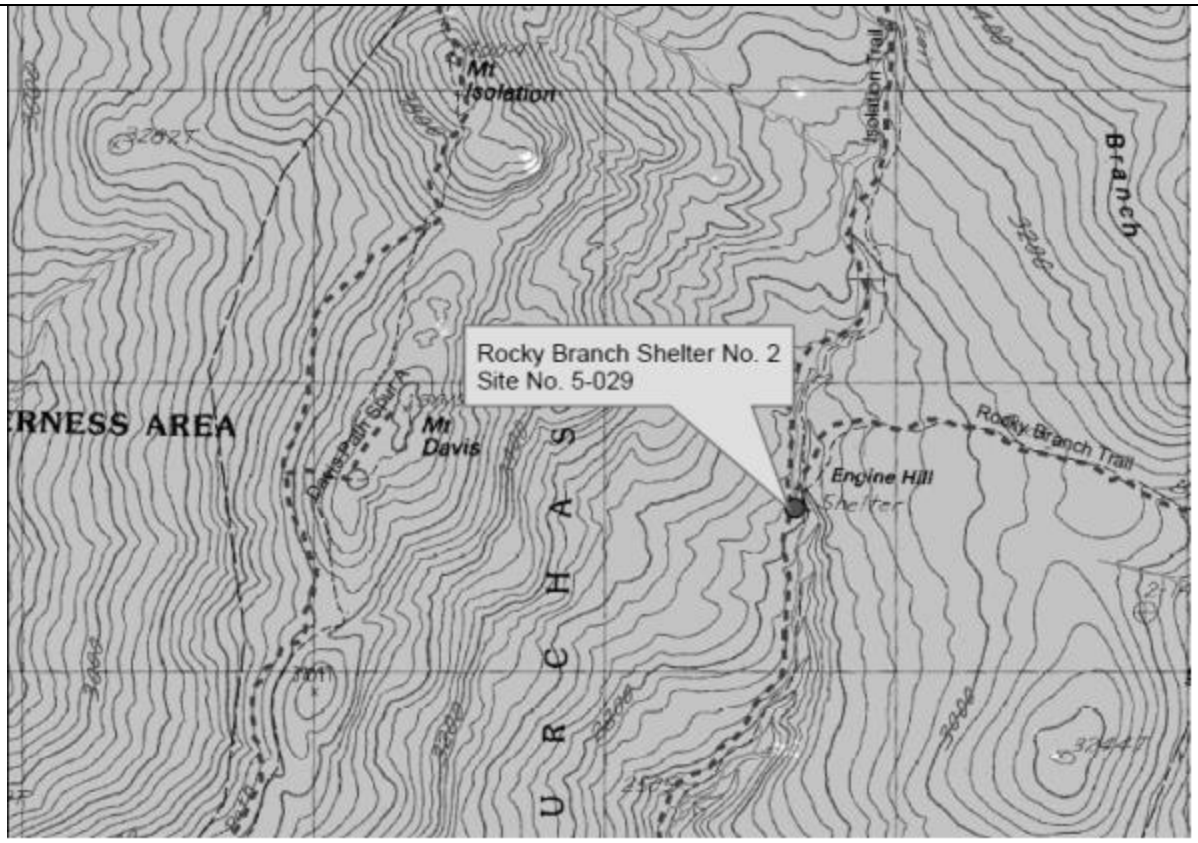


Figure 78. Rocky Branch No. 2 shelter location map. USGS 7.5' Stairs Mountain Quadrangle.

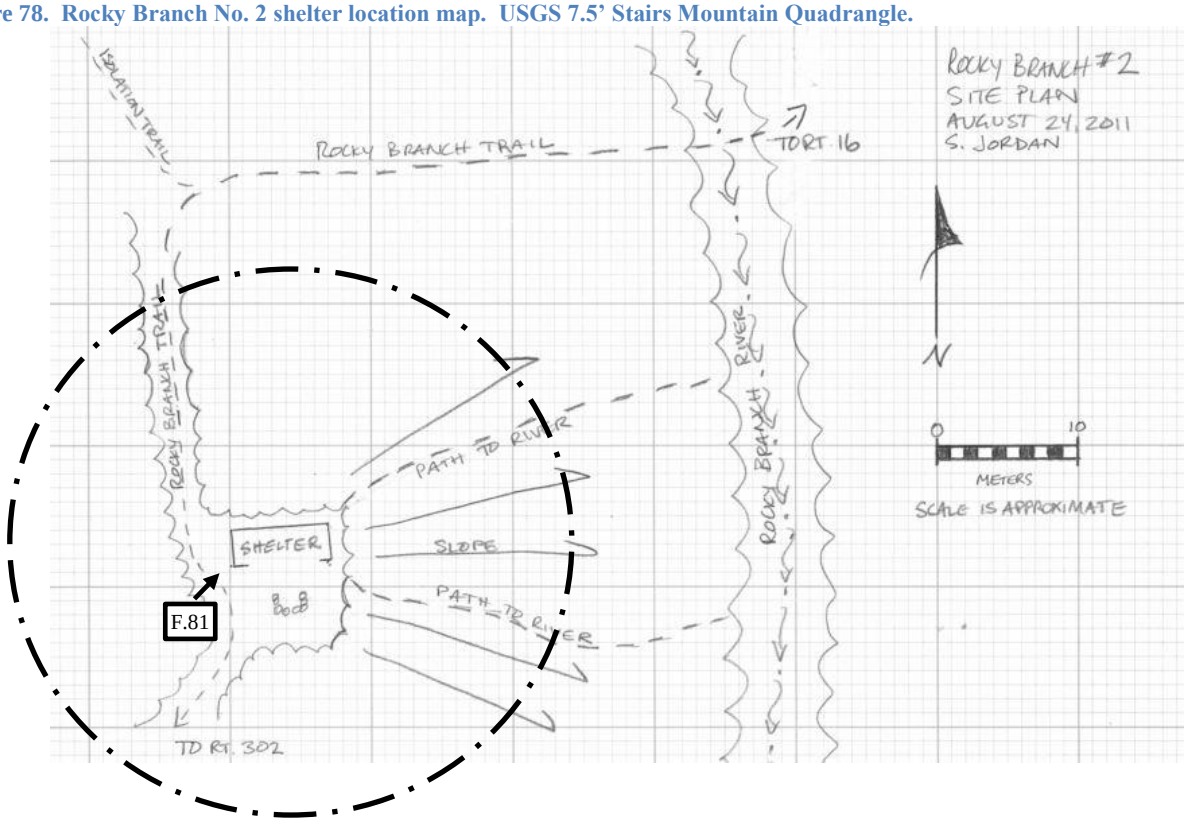


Figure 79. Rocky Branch No. 2 shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

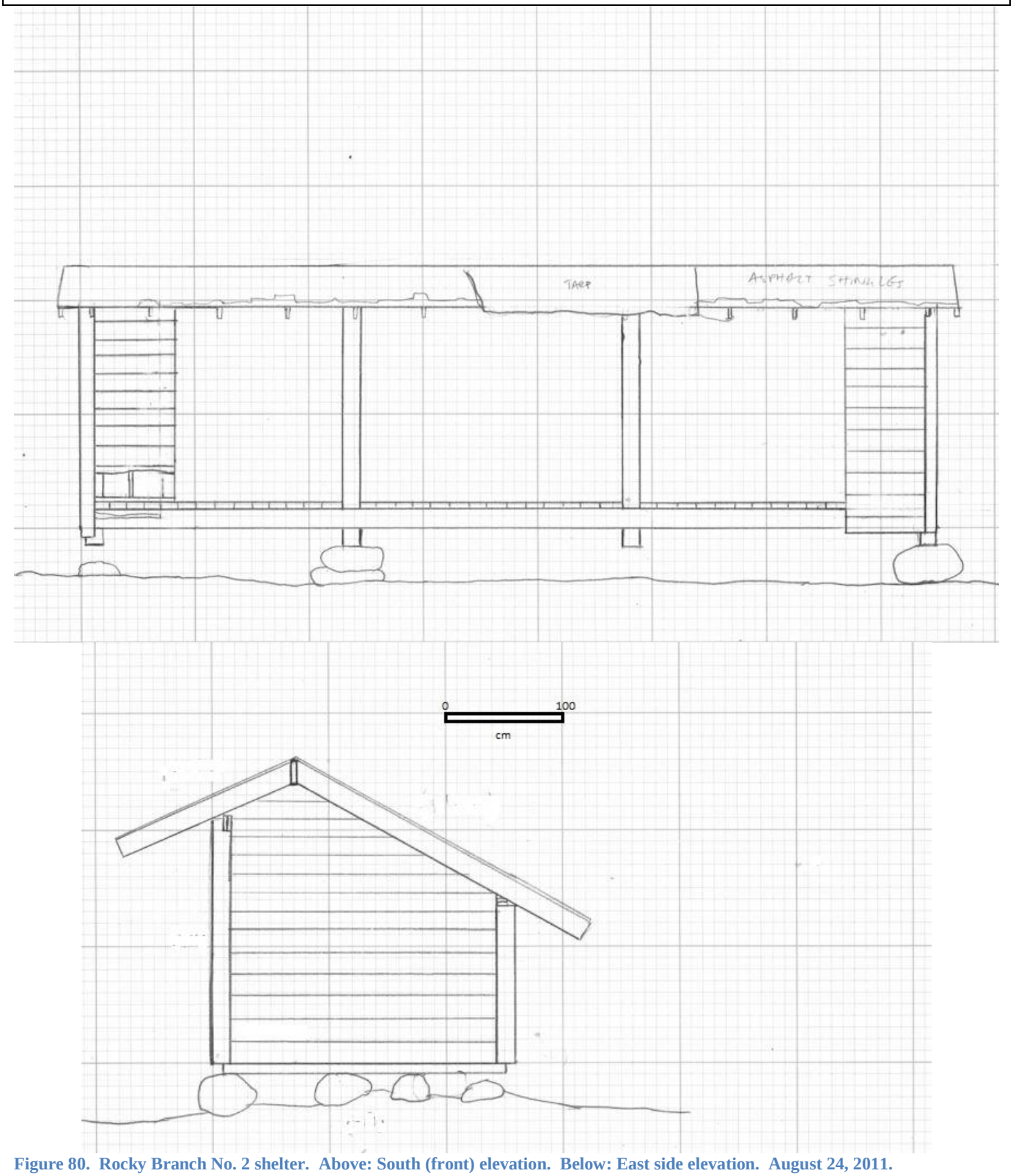


Figure 80. Rocky Branch No. 2 shelter. Above: South (front) elevation. Below: East side elevation. August 24, 2011.

Figure 81. Rocky Branch No. 2 shelter. View NE. August 24, 2011.

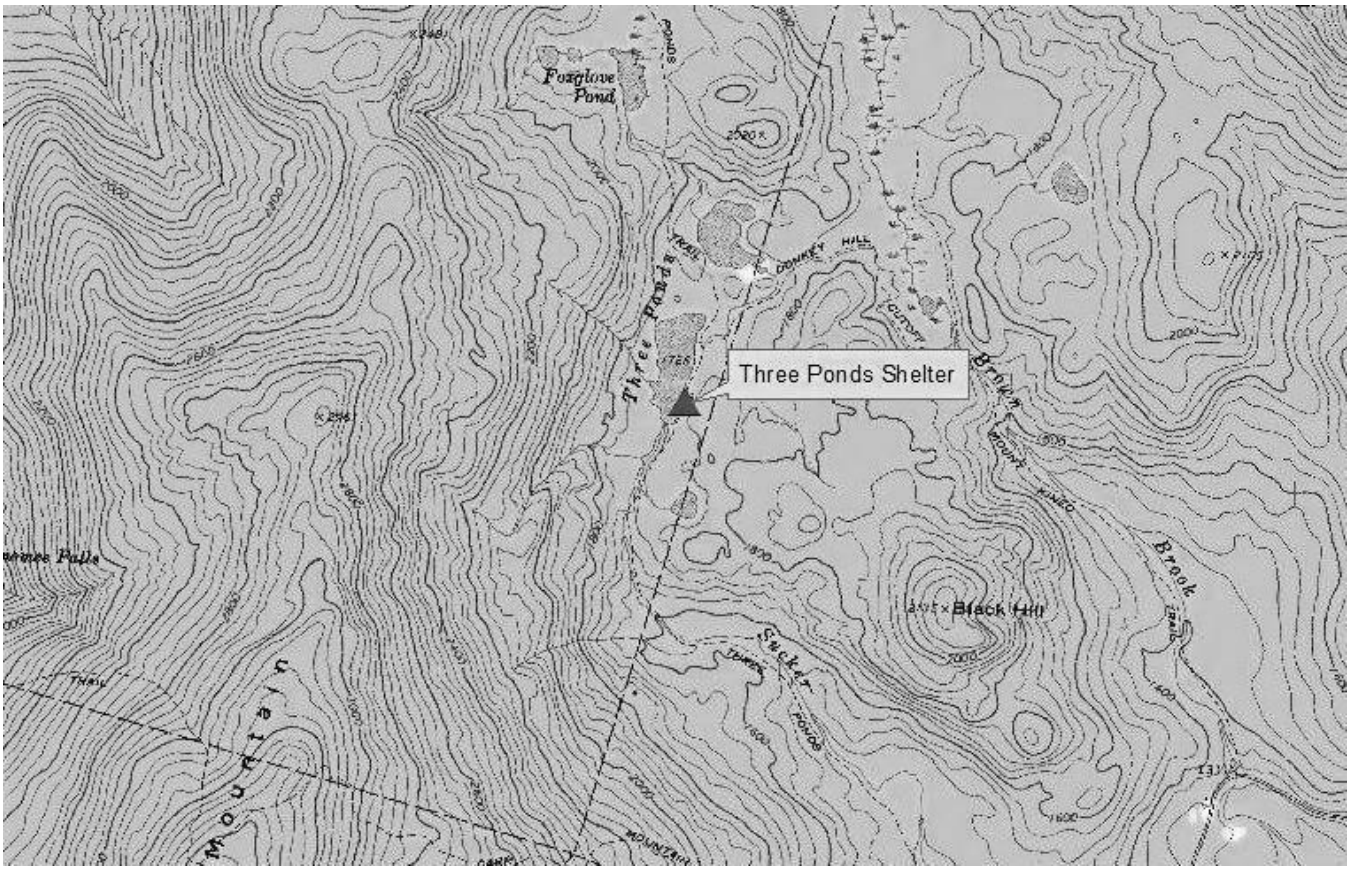


Figure 82. Three Ponds shelter location map. USGS 7.5' Mt. Kineo Quadrangle.

Figure 83. Three Ponds shelter, c.1970. Photo from Roenke 1991.

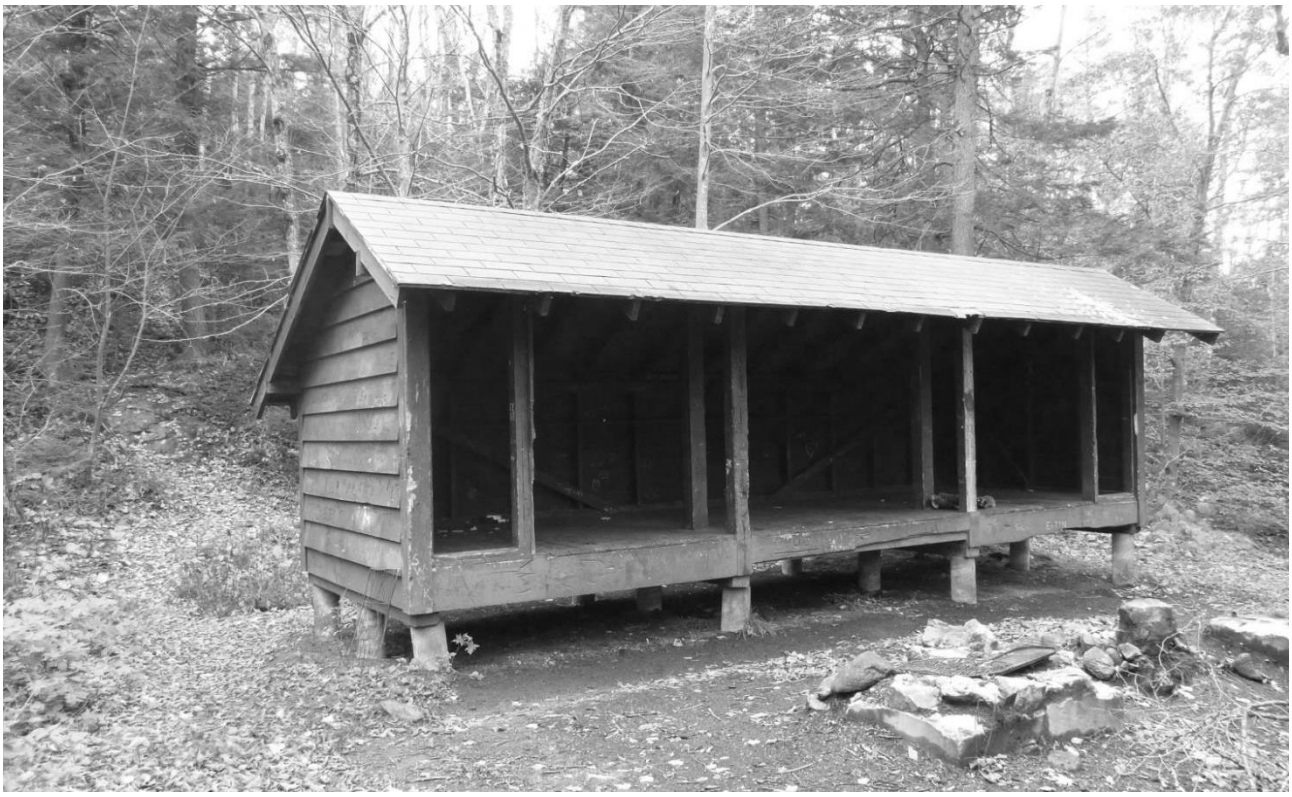


Figure 84. Three Ponds shelter. View SE. October 21, 2011.

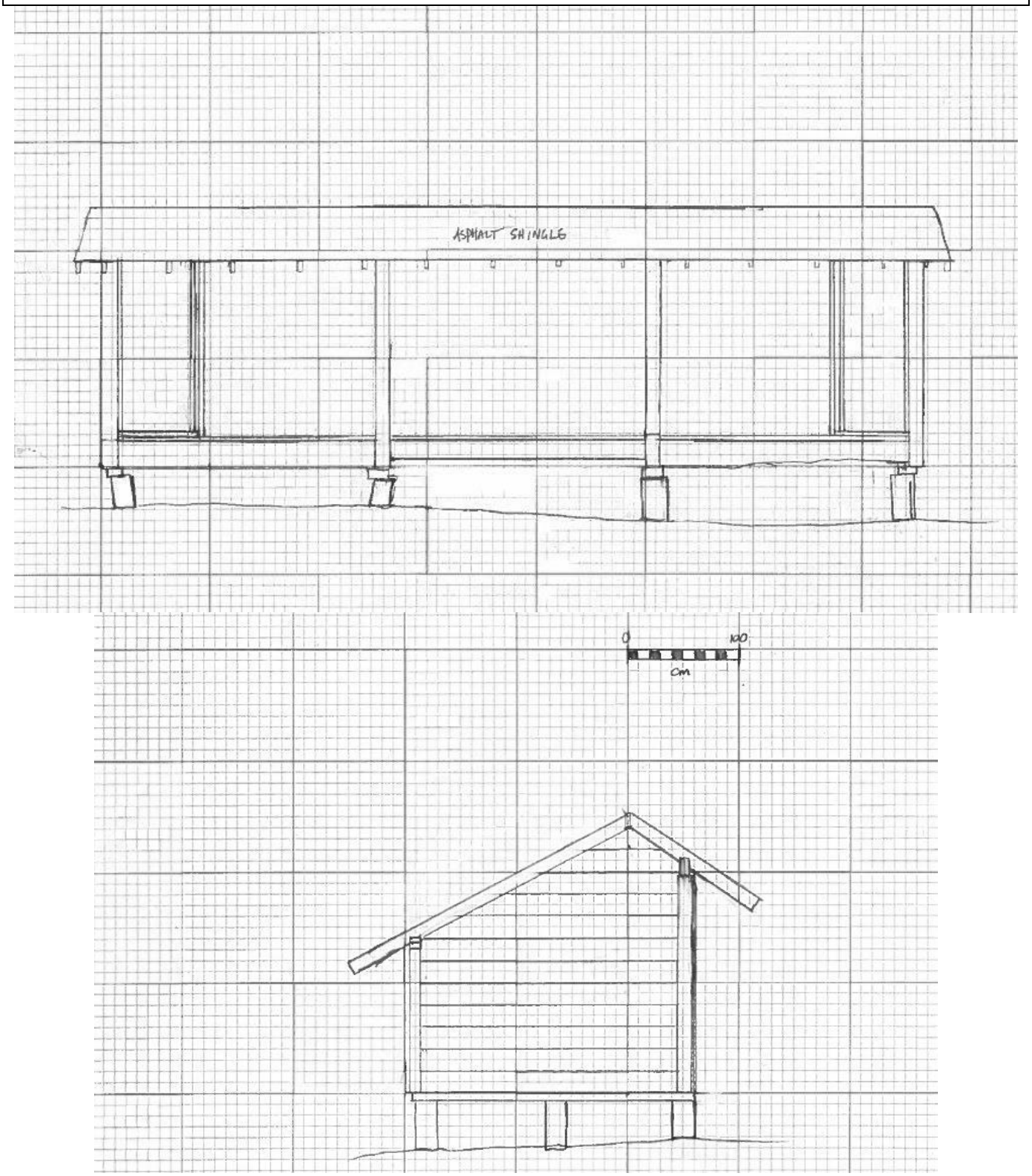


Figure 85. Three Ponds shelter drawings. Above: Northwest (front) elevation. Below: Northeast side elevation. October 21, 2011.

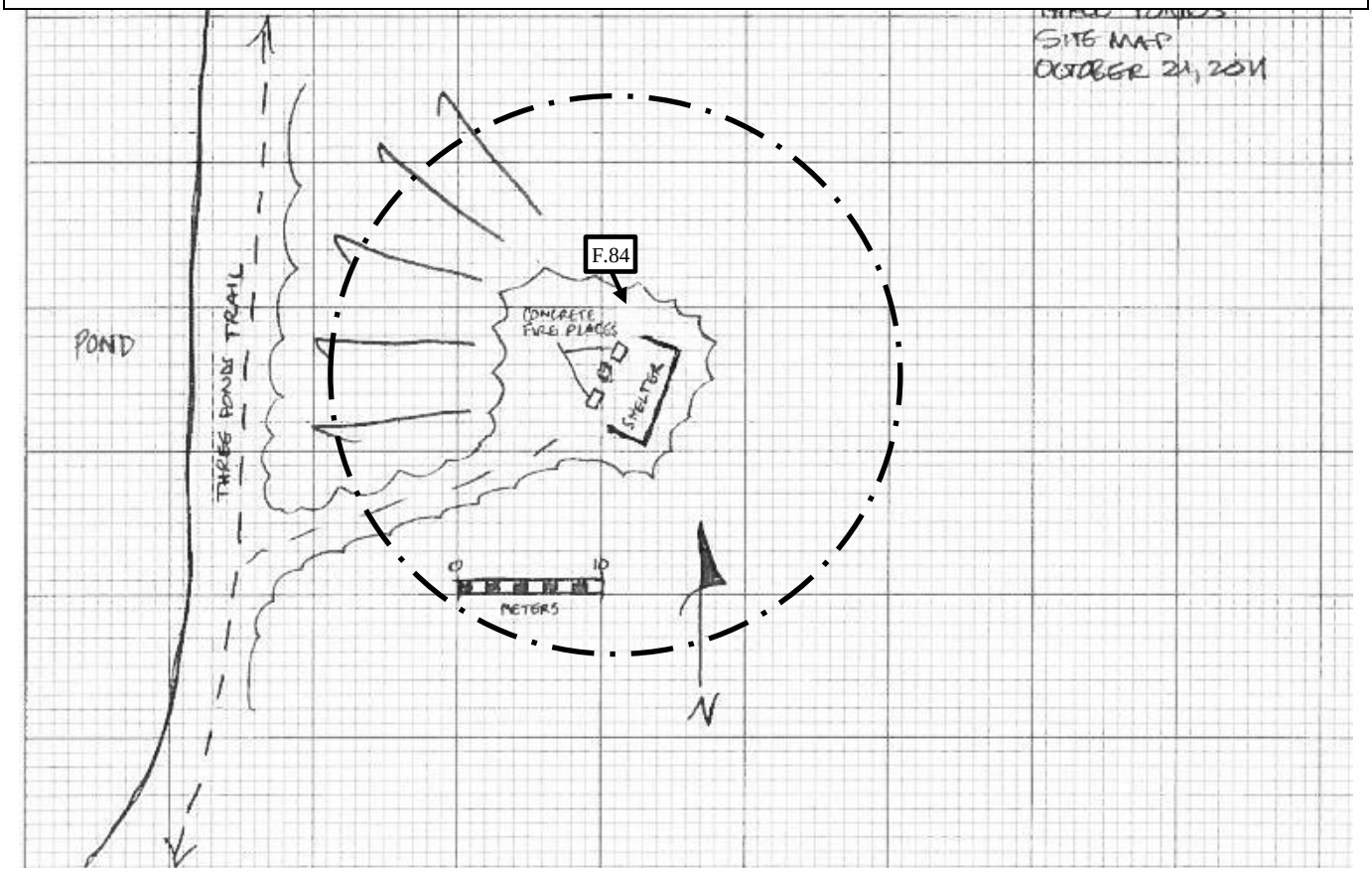


Figure 86. Three Ponds shelter site map. Dashed circle indicates approximate location of 20m radius site boundary.

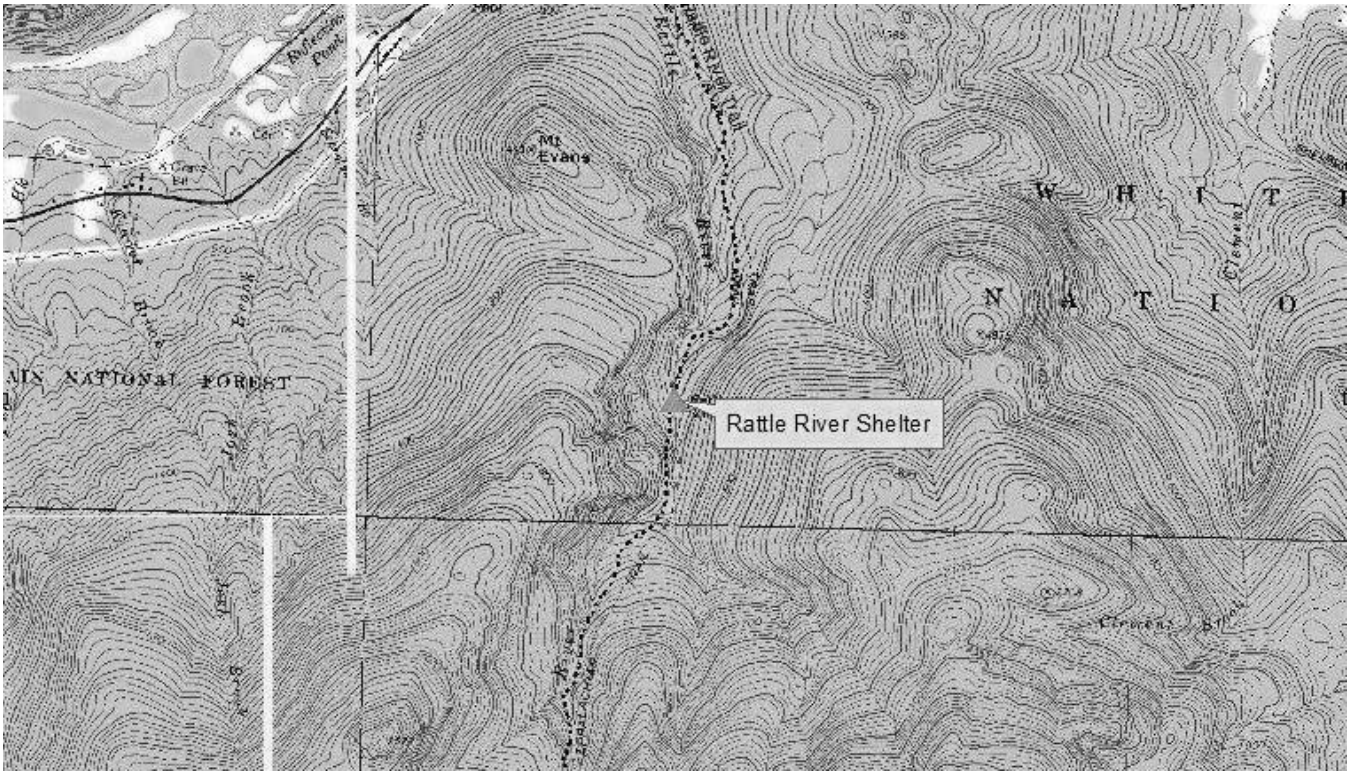


Figure 87. Rattle River shelter location map. USGS 7.5' Shelburne Quadrangle.

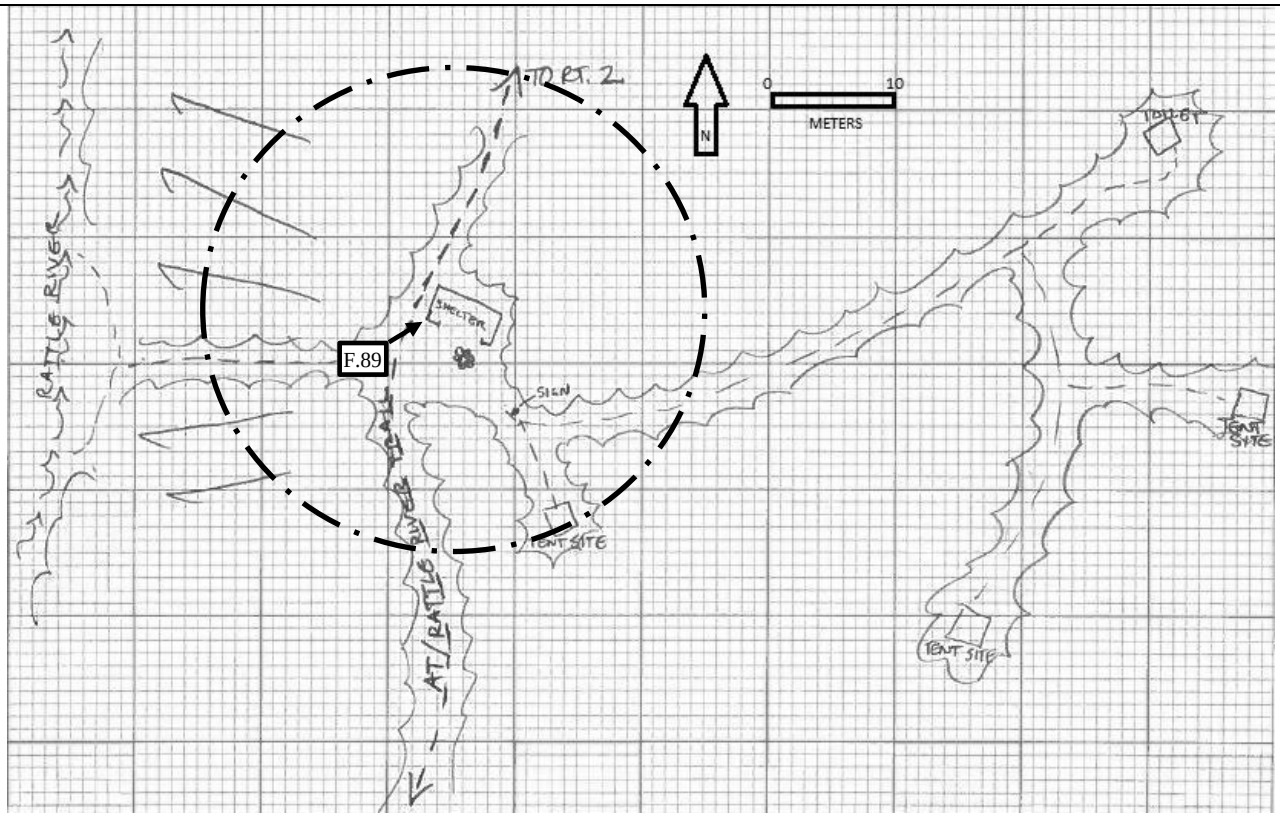


Figure 88. Rattle River shelter site map. Dashed circle indicates approximate location of 20m radius site boundary.

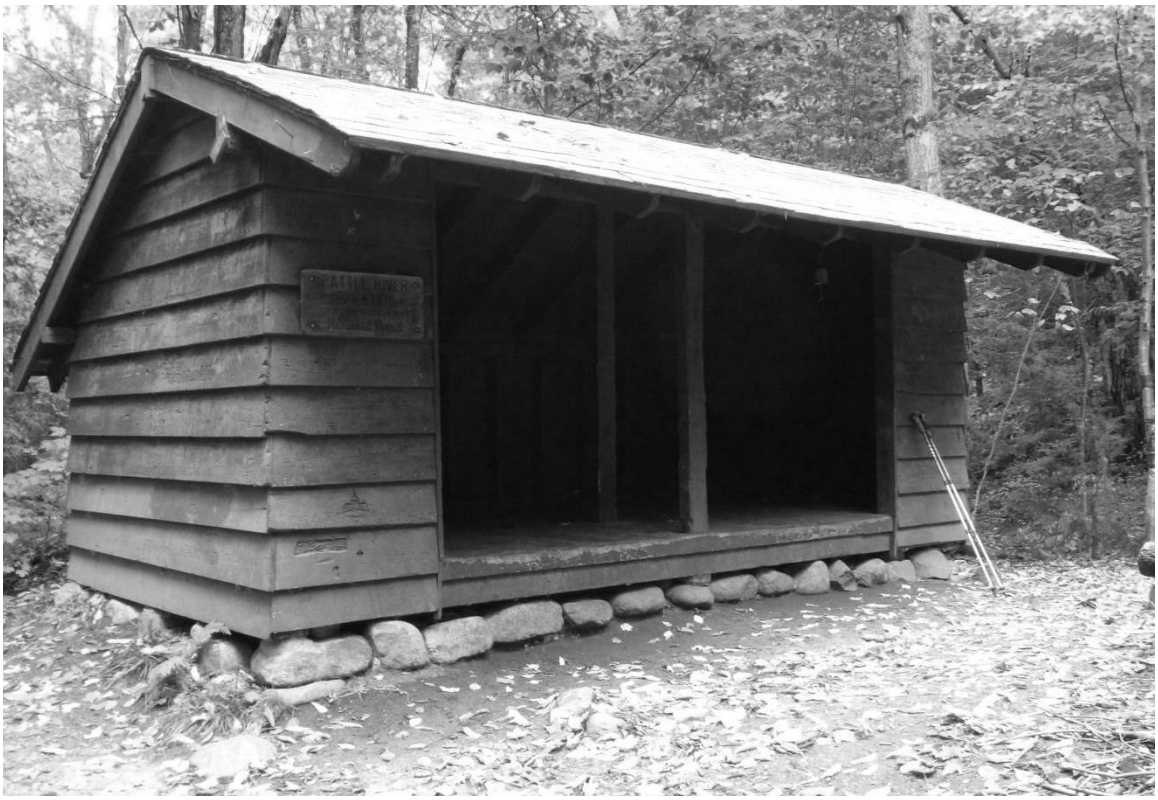


Figure 89. Rattle River shelter. View NE. October 5, 2011.

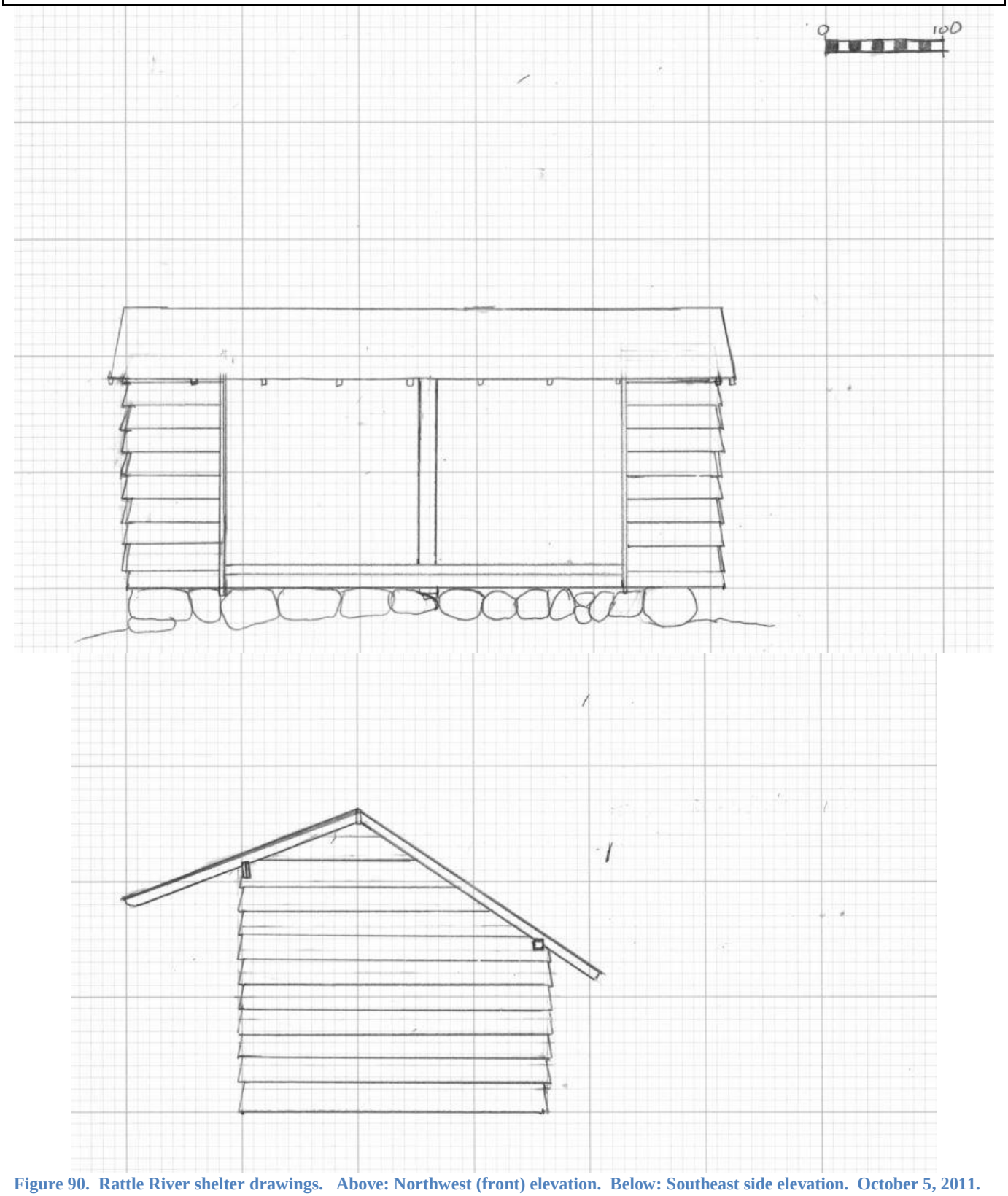


Figure 90. Rattle River shelter drawings. Above: Northwest (front) elevation. Below: Southeast side elevation. October 5, 2011.

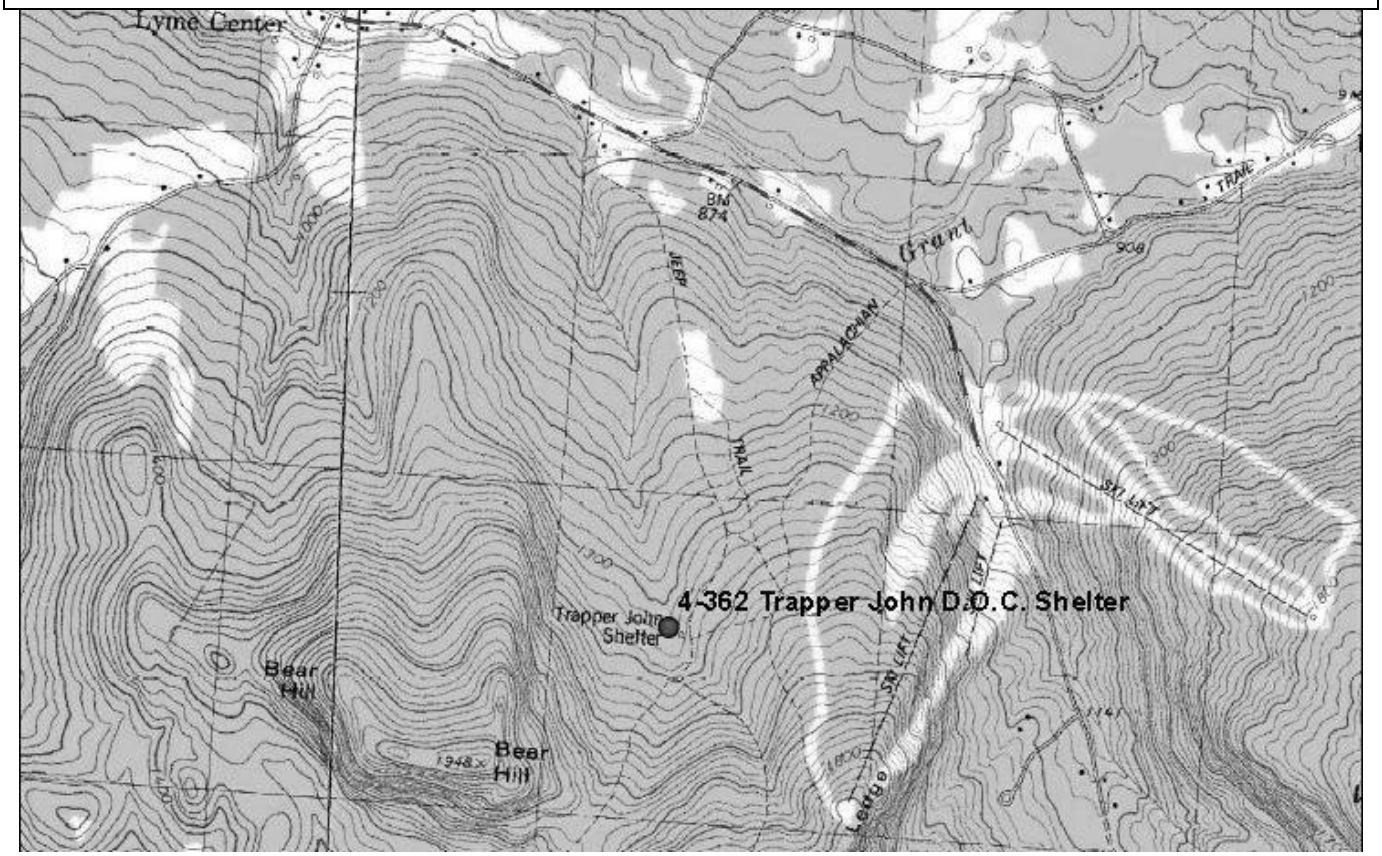


Figure 91. Trapper John shelter location map. USGS 7.5' Smarts Mountain Quadrangle.

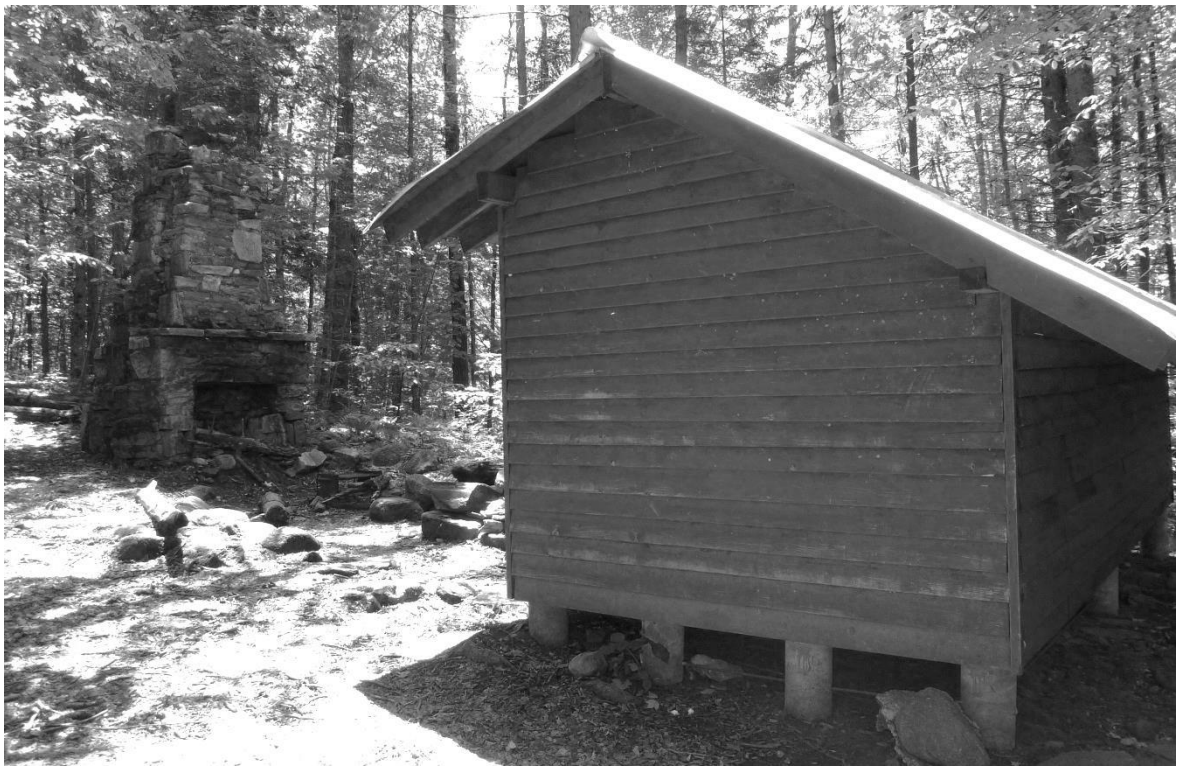


Figure 92. Trapper John shelter, View SW, with Holt's Ledge Cabin chimney at left. June 7, 2012.

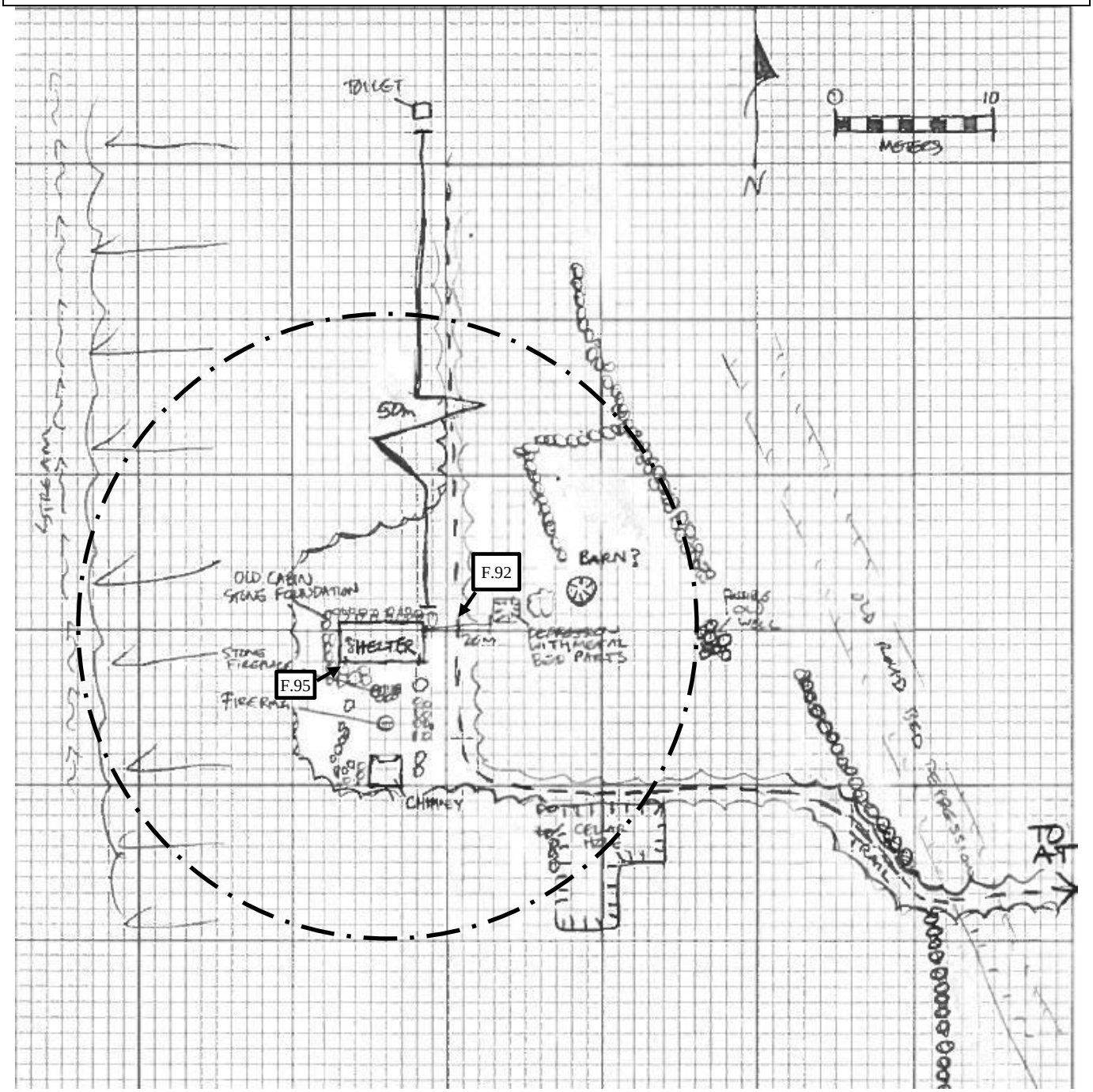


Figure 93. Trapper John shelter site map. Dashed circle indicates approximate location of 20m radius site boundary.

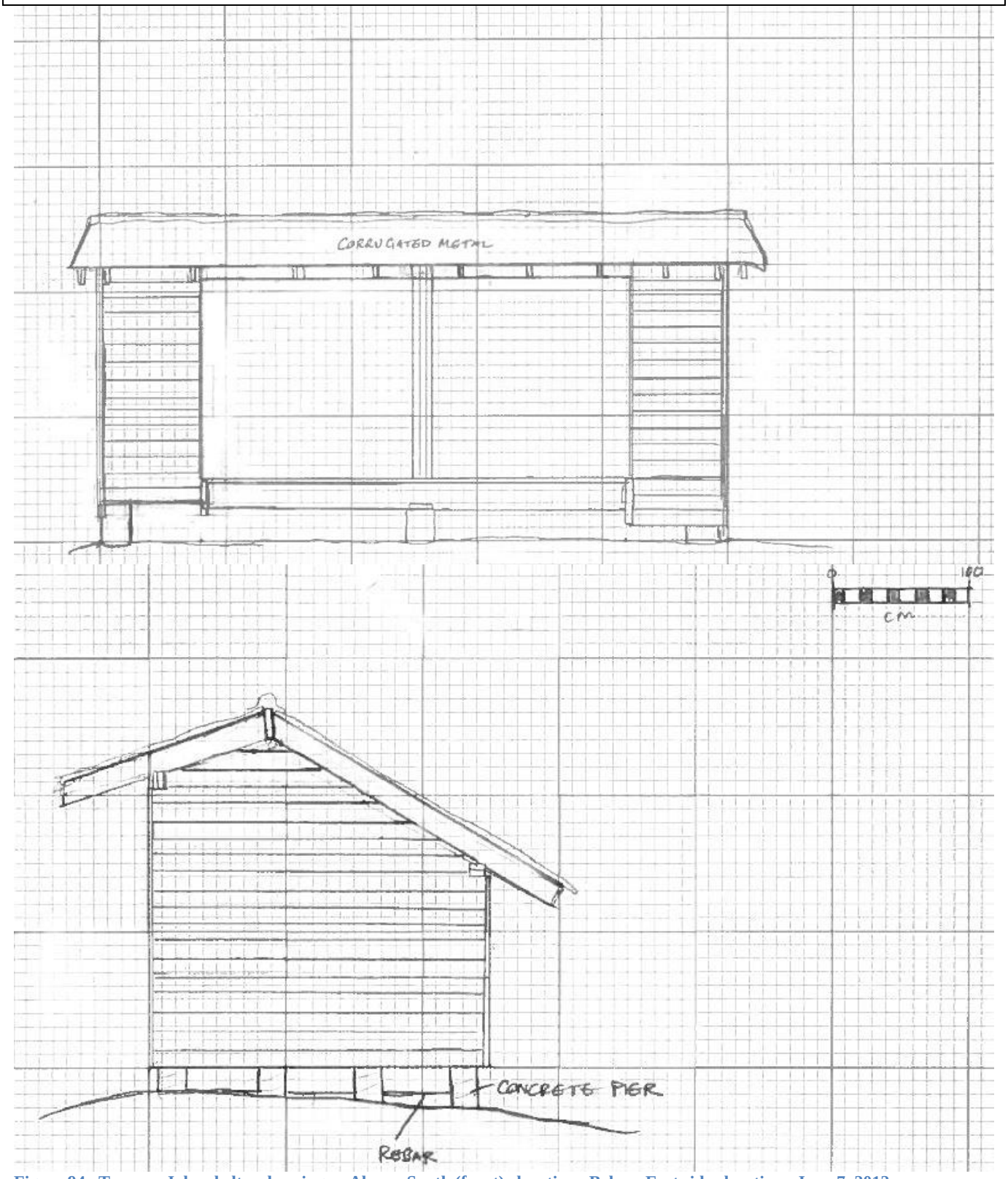


Figure 94. Trapper John shelter drawings. Above: South (front) elevation. Below: East side elevation. June 7, 2012.

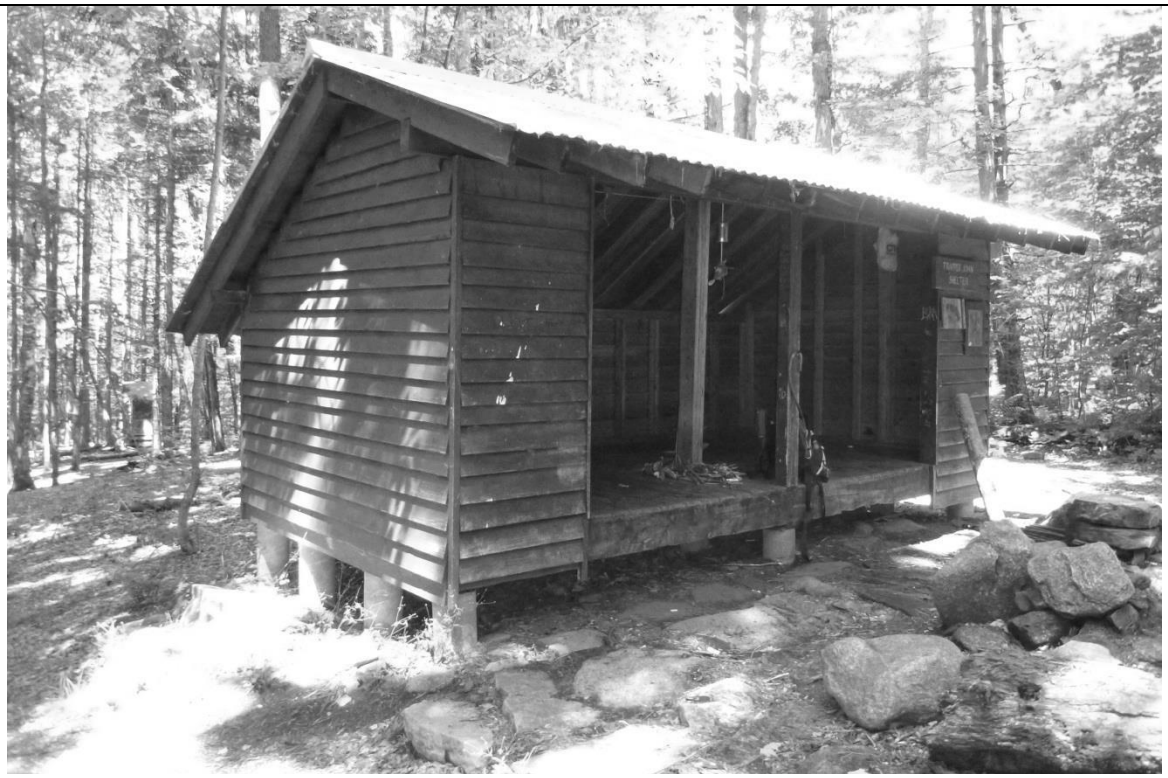


Figure 95. Trapper John shelter. View NE. June 7, 2012.

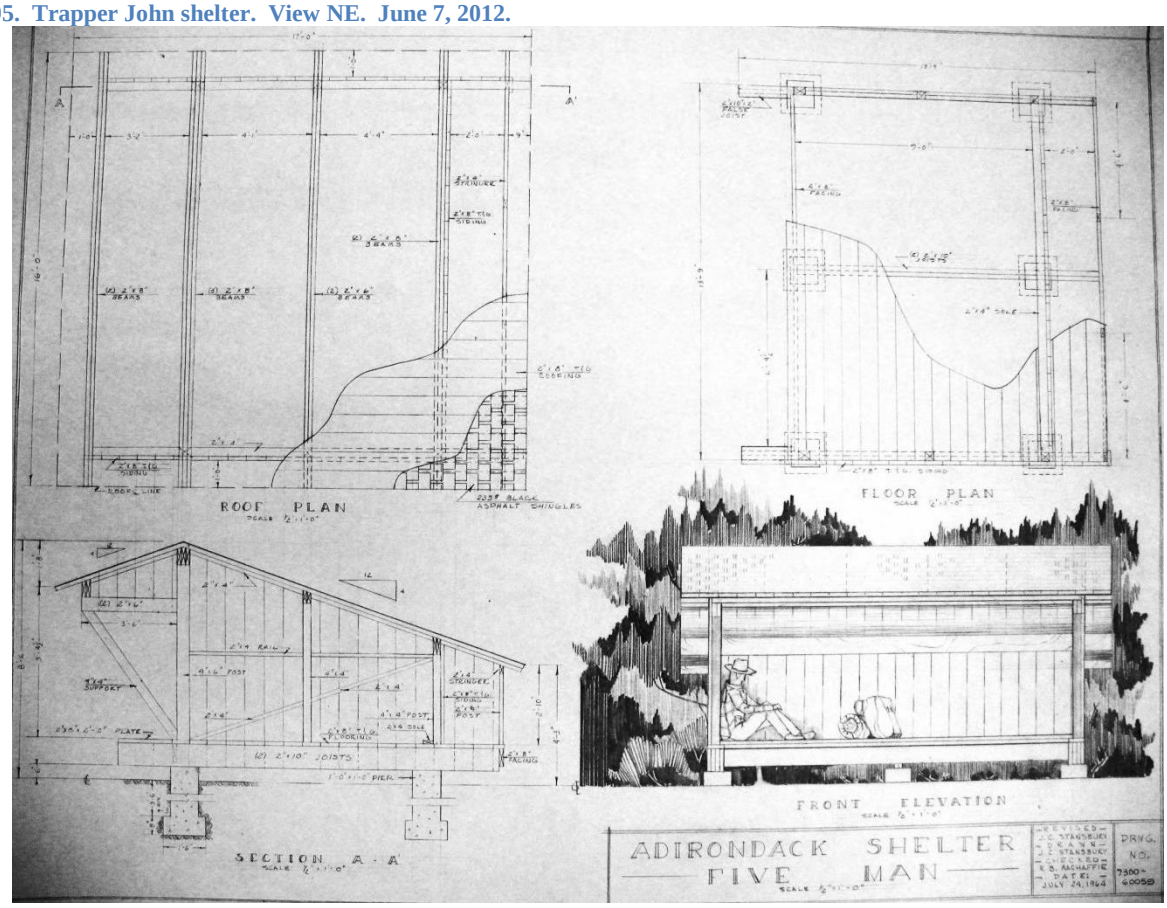


Figure 96. USFS design for Adirondack Shelter-Five Man, dated 1964. Forest Service Drawing No. 7300-60059.

Figure 97. Example of USFS "Adirondack Shelter, Five Man" (FS Drawing No 7300-60059) style shelter. Spruce Brook shelter (1964-2009), September 11, 2006. Photo courtesy of Susan Schibanoff.

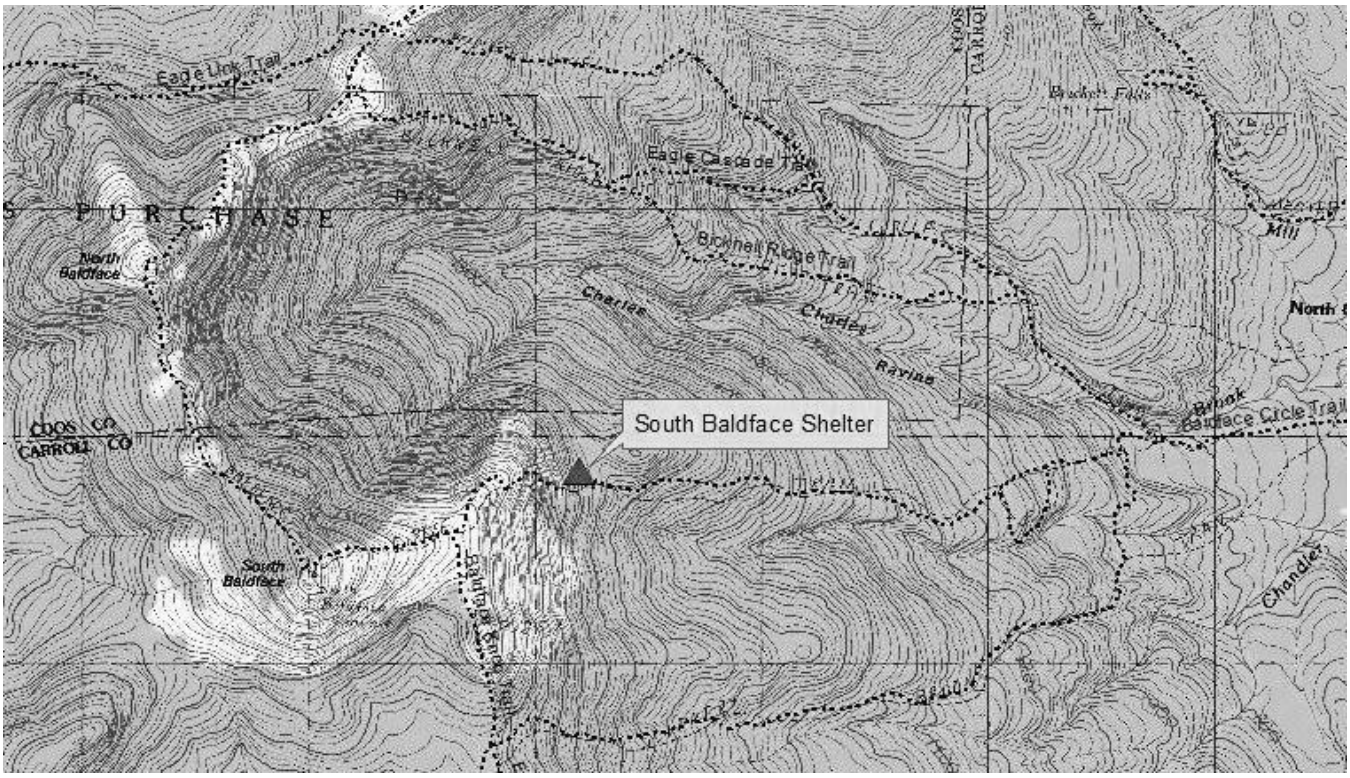


Figure 98. South Baldface shelter location map. USGS 7.5' Chatham Quadrangle.

Figure 99. South Baldface shelter. View SE. Painted trail blazes on corner of shelter indicate the hiking trail route along two sides of the shelter; also note covered wood storage area along back of shelter. September 20, 2012.

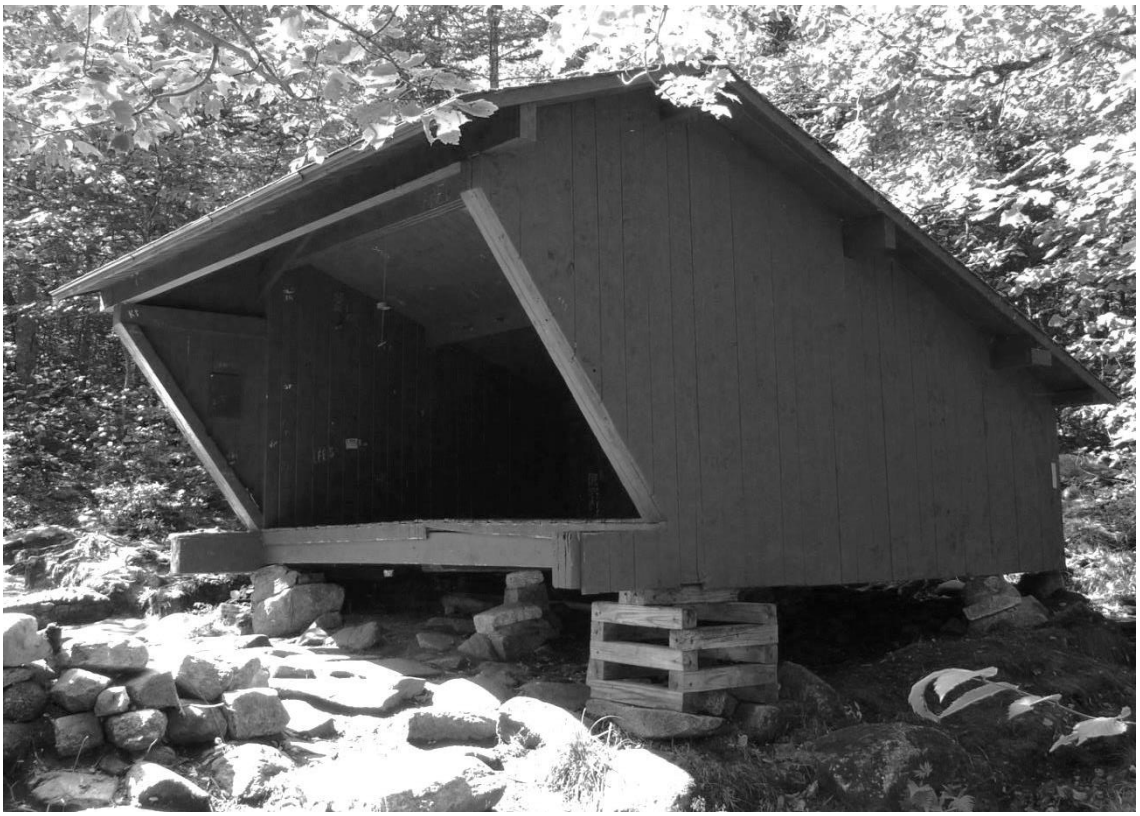


Figure 100. South Baldface shelter. View SW. September 20, 2012.

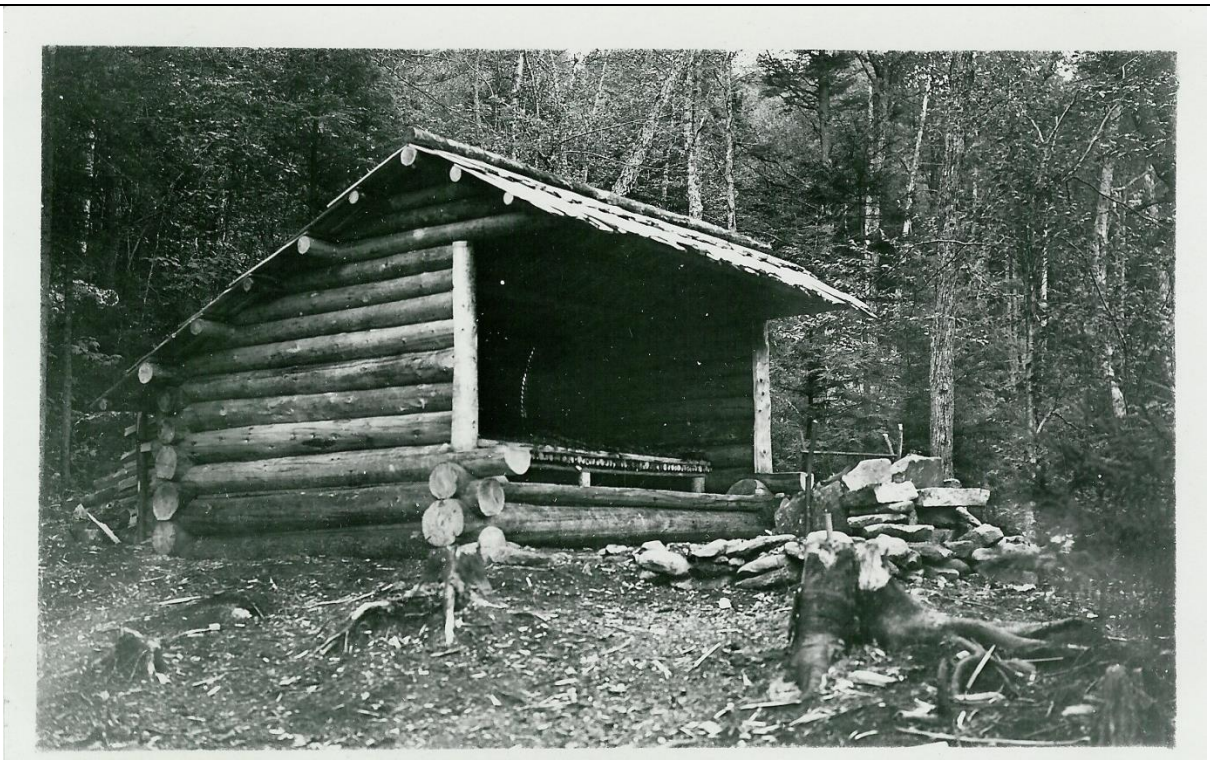


Figure 101. The original South Baldface (a.k.a. Baldface Circle) shelter (1936-1940) in the "USFS Plan for Forest Camp Adirondack Shelter-1935" style. Undated postcard.

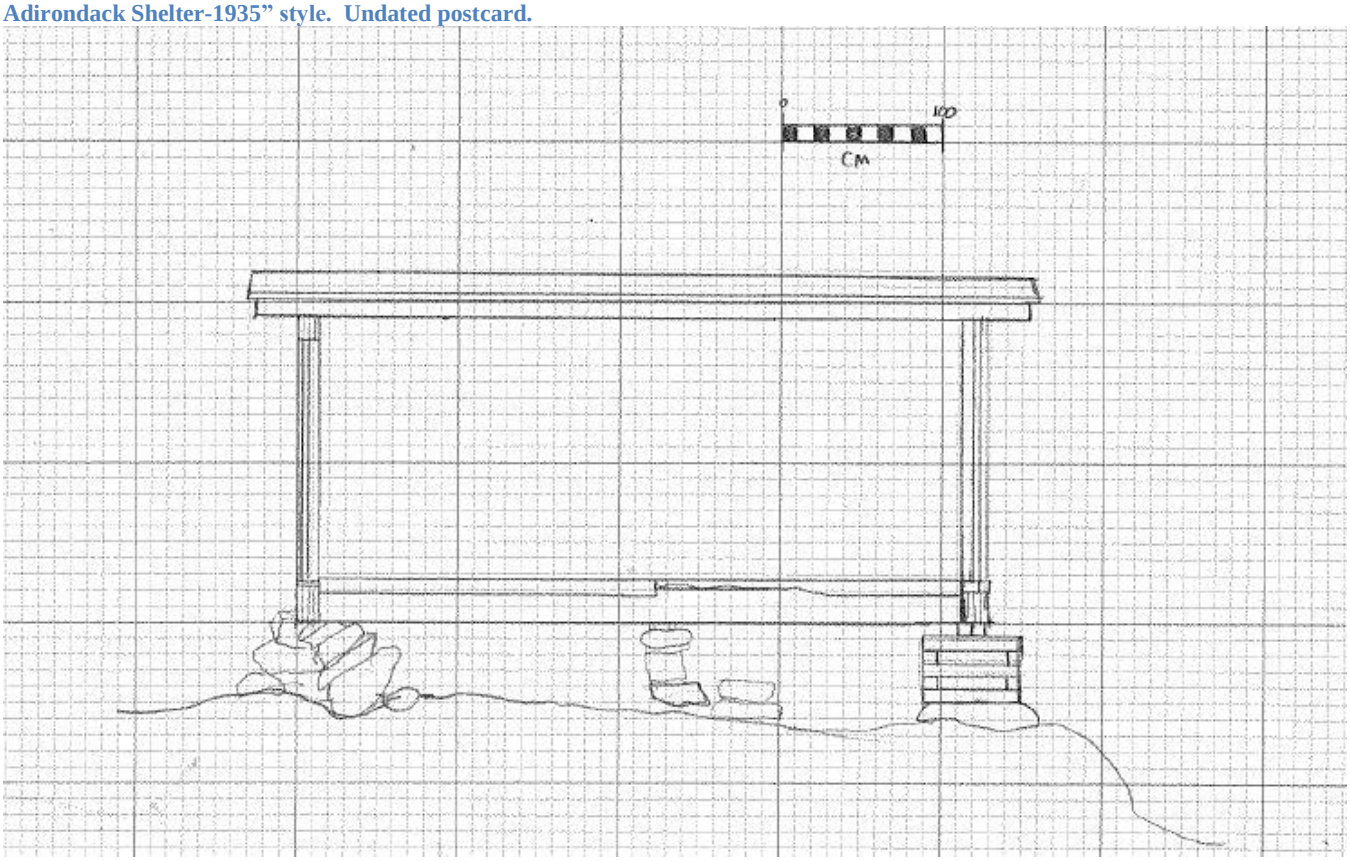


Figure 102. South Baldface shelter drawing. East (front) elevation. September 20, 2012.

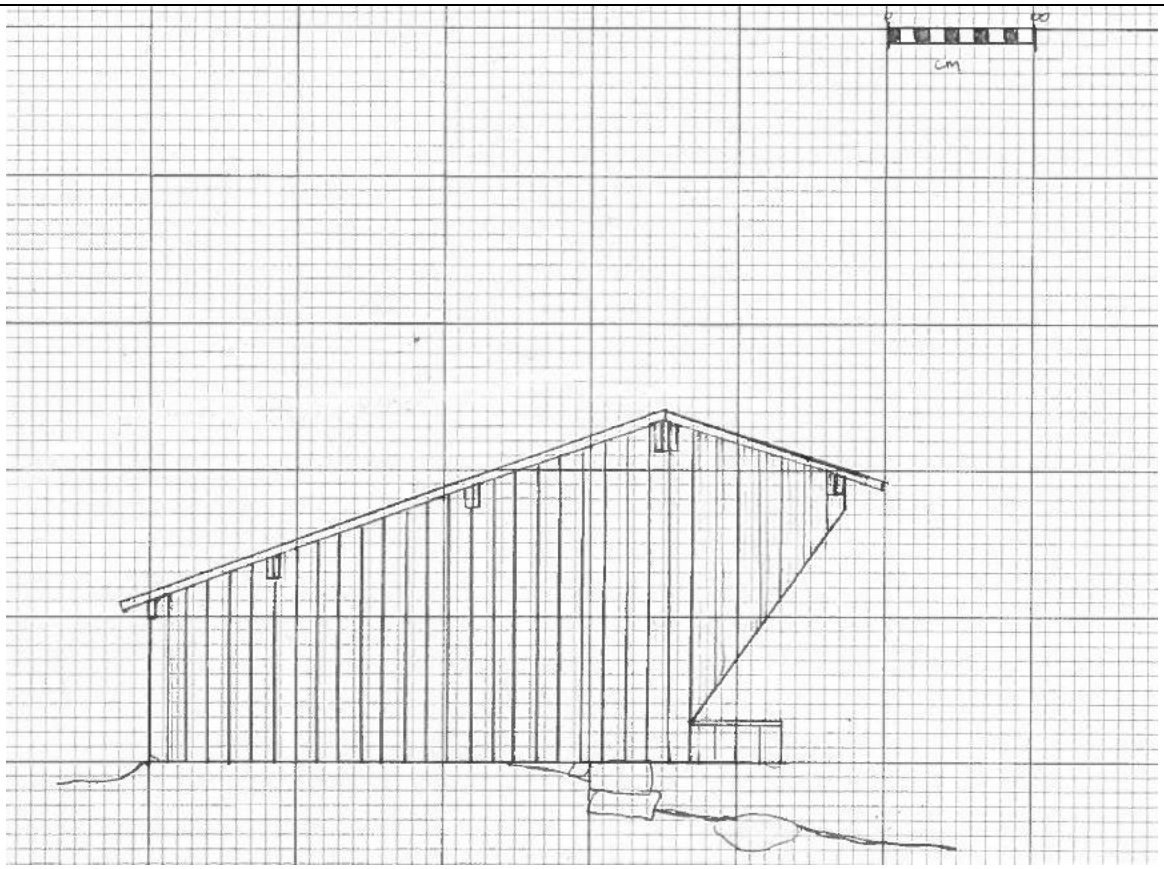


Figure 103. South Baldface shelter drawing. South side elevation. September 20, 2012.

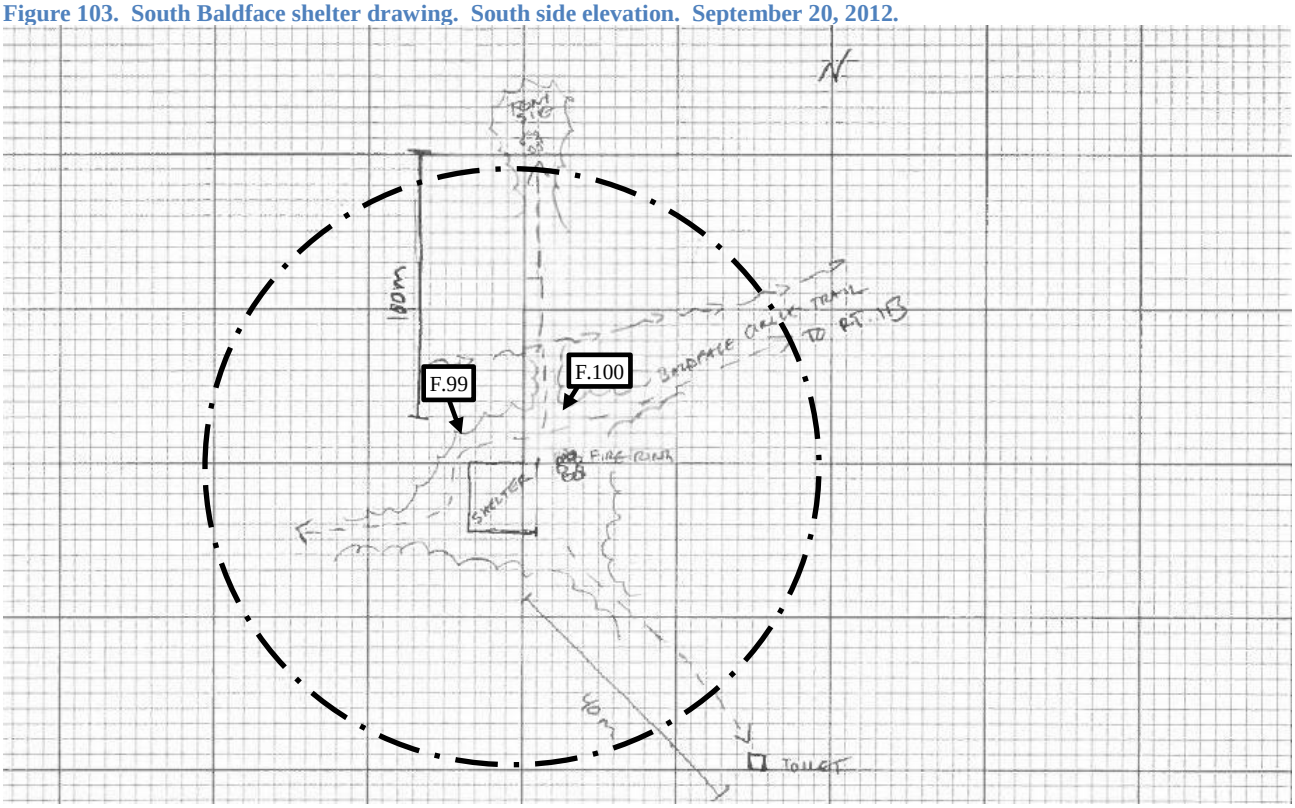


Figure 104. South Baldface shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

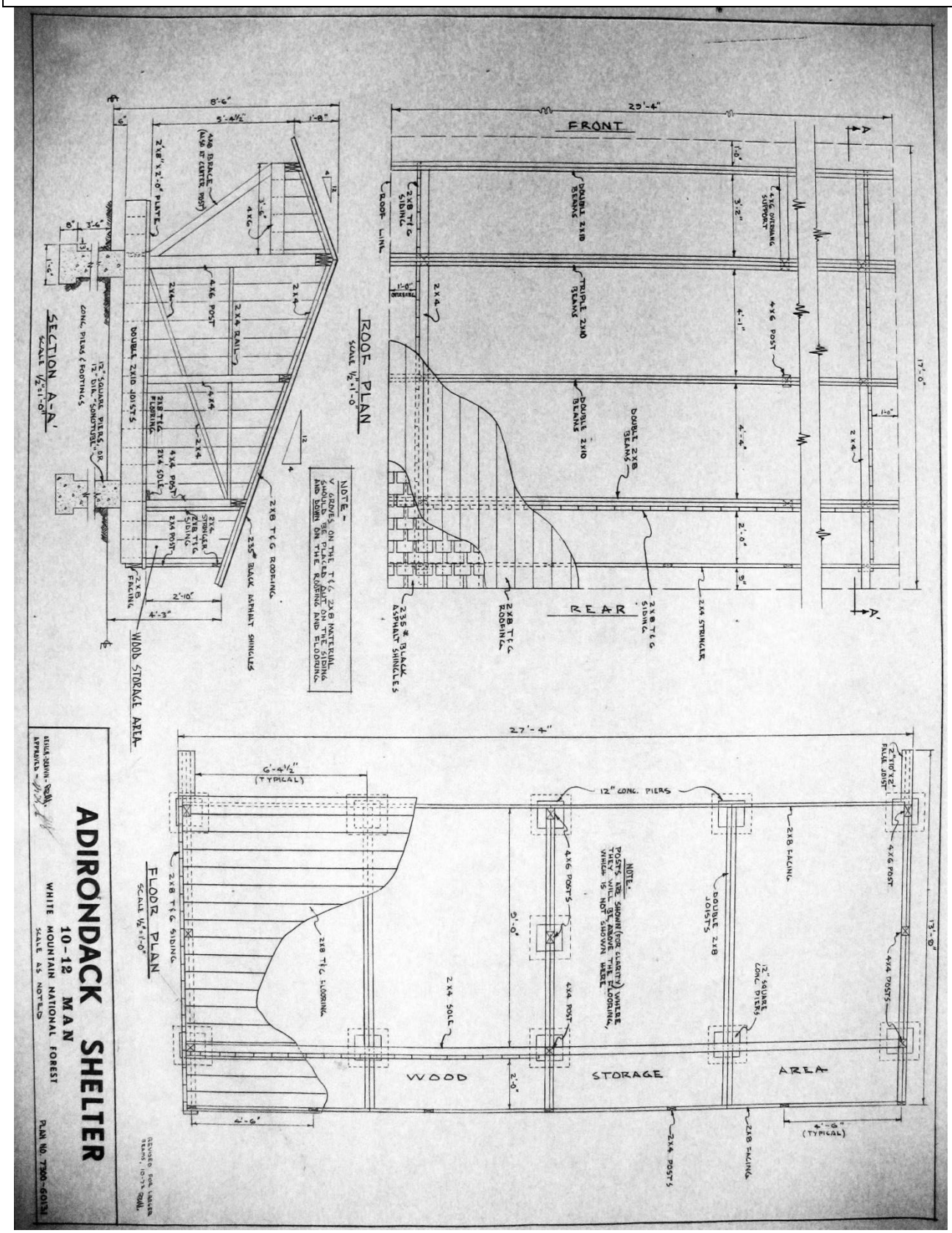


Figure 105. Design for USFS "Adirondack Shelter, 10-12 Man," dated Forest Service Drawing No. 7300-60131.

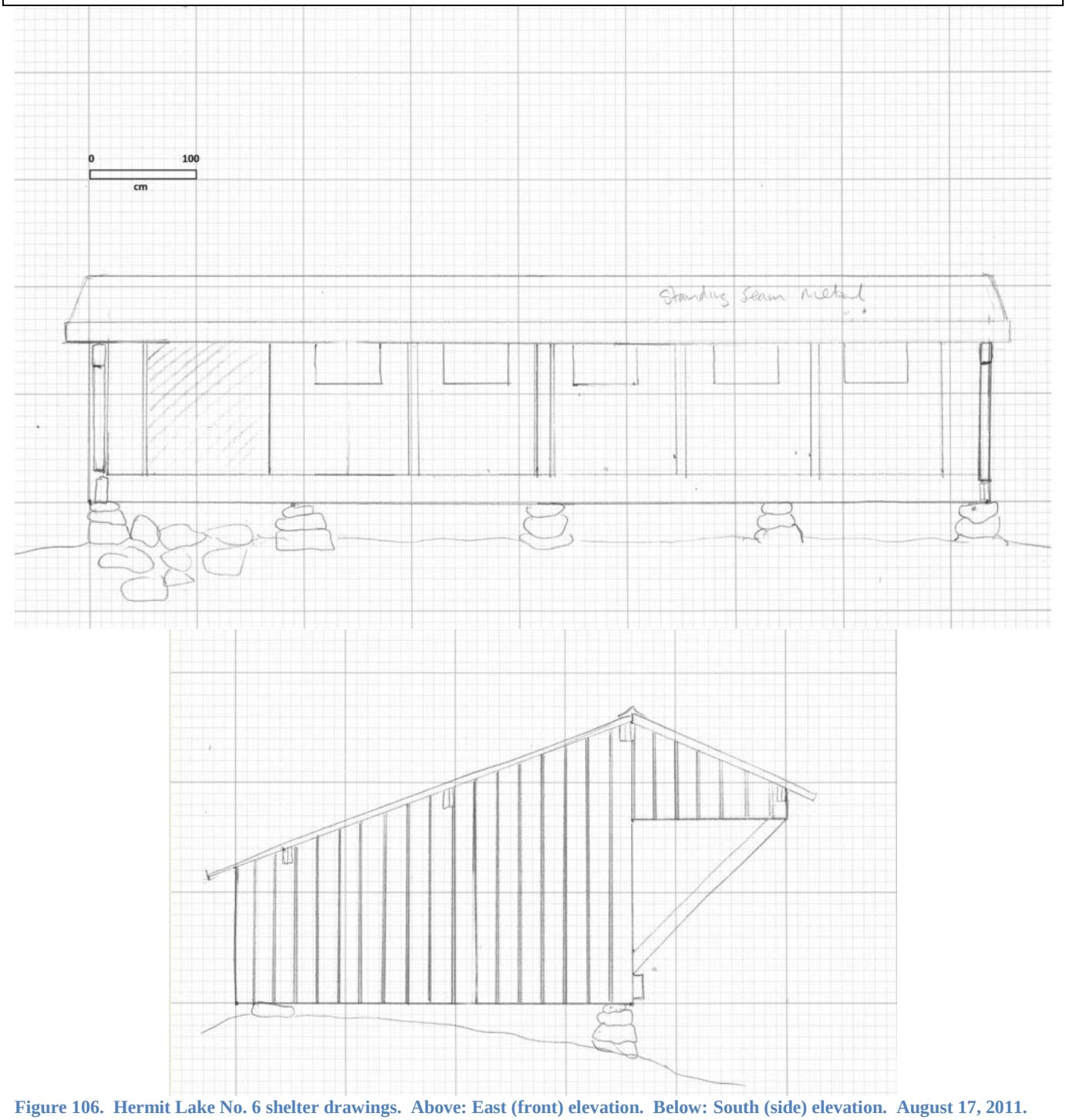


Figure 106. Hermit Lake No. 6 shelter drawings. Above: East (front) elevation. Below: South (side) elevation. August 17, 2011.

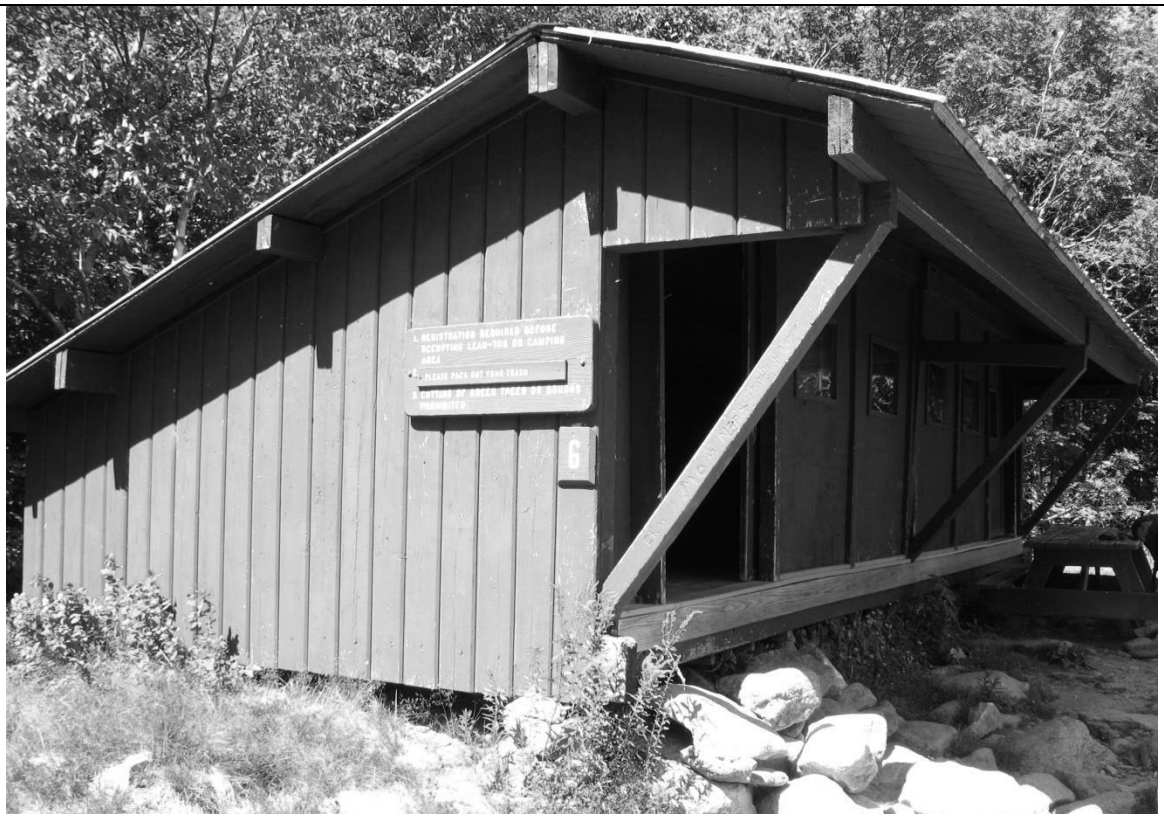


Figure 107. Hermit Lake No. 6 shelter. View NW. August 17, 2011.

NO. 6 SHELTER IN TUCKERMAN RAVINE

U. S. Forest Service

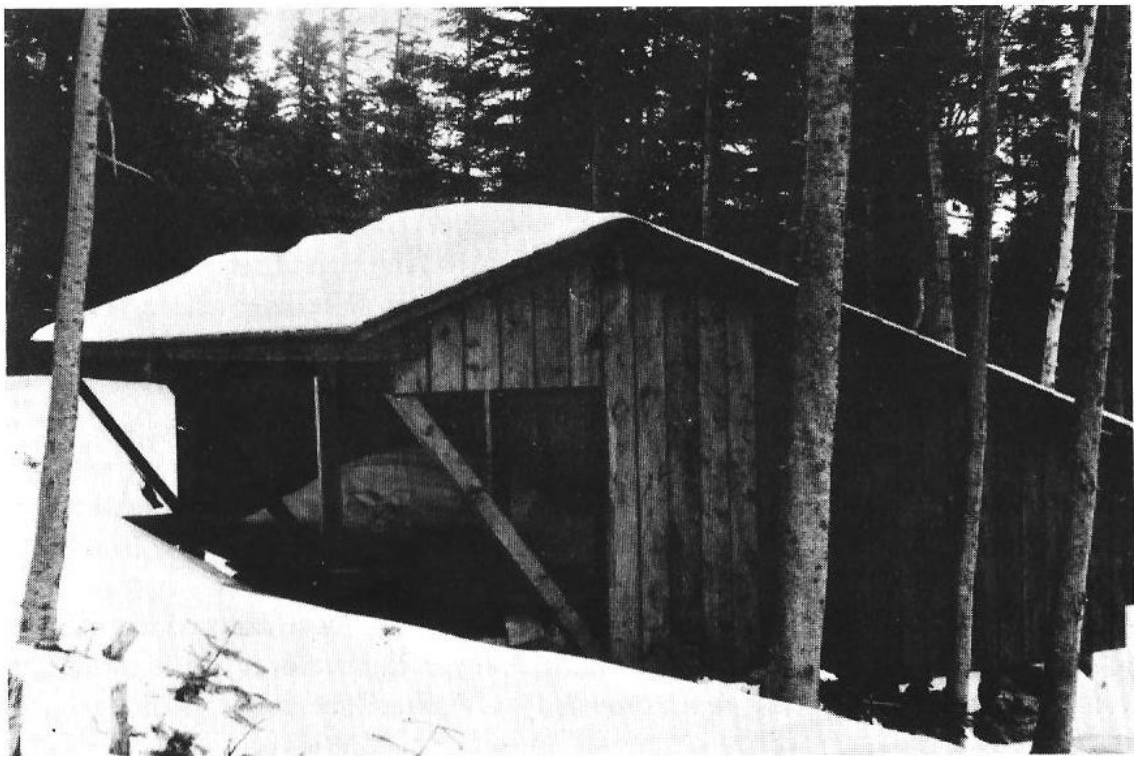


Figure 108. Hermit Lake No. 6 shelter, 1968. Forest Service photo published in Appalachia Journal Vol. XXXVII(1): 142.

Figure 109. Hermit Lake No. 7 shelter. View N. Front overhang has been truncated. August 17, 2011.

Figure 110. Hermit Lake No. 8 shelter. View NE. August 17, 2011.

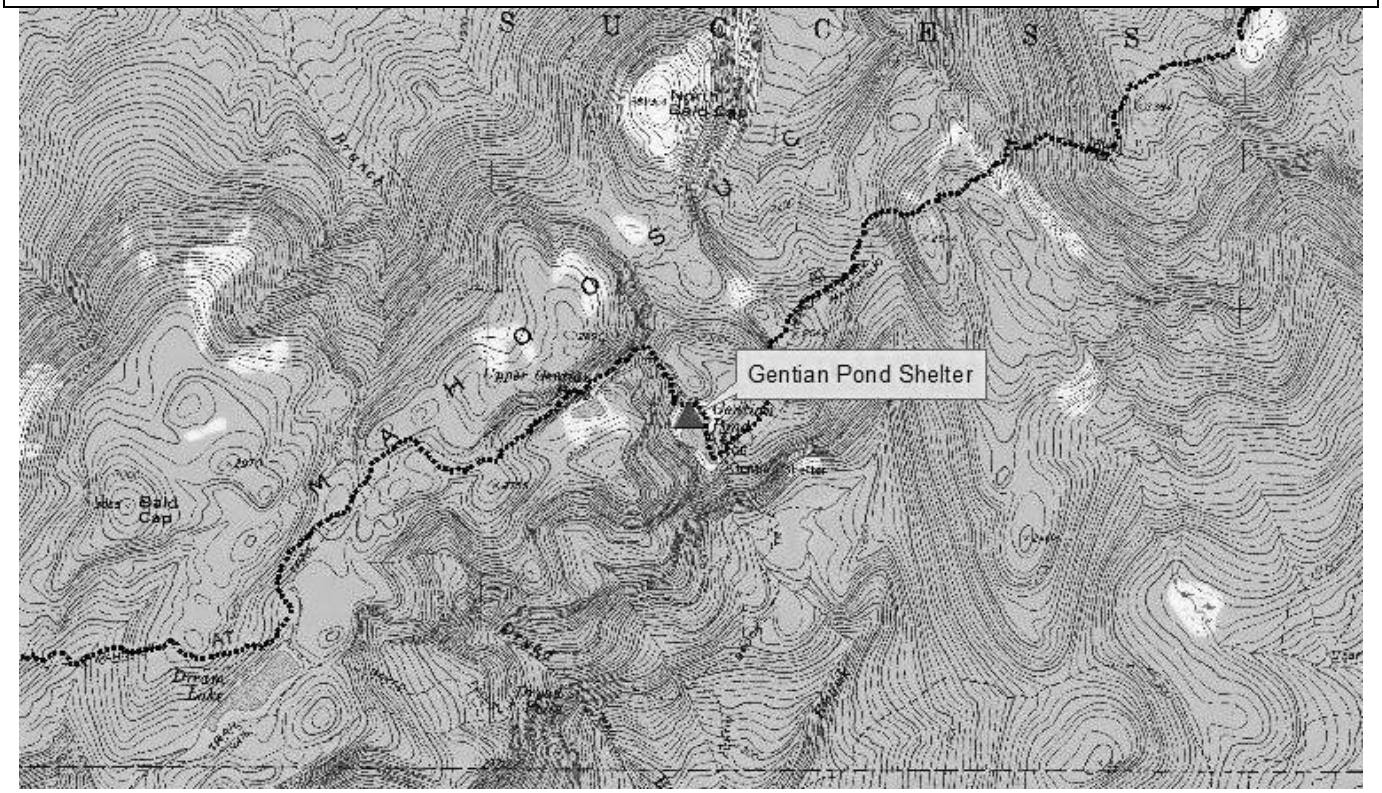


Figure 111. Gentian Pond shelter location map. USGS 7.5' Shelburne Quadrangle.

Figure 112. The original Gentian Pond shelter in the Small-Log Saltbox style, 1923. Lantern slide by Karl Harrington, Appalachian Mountain Club Archives, 5 Joy Street, Boston. Call number LS 42.13.

Figure 113. Gentian Pond shelter, 2012. Photo courtesy of Sally Manikian.

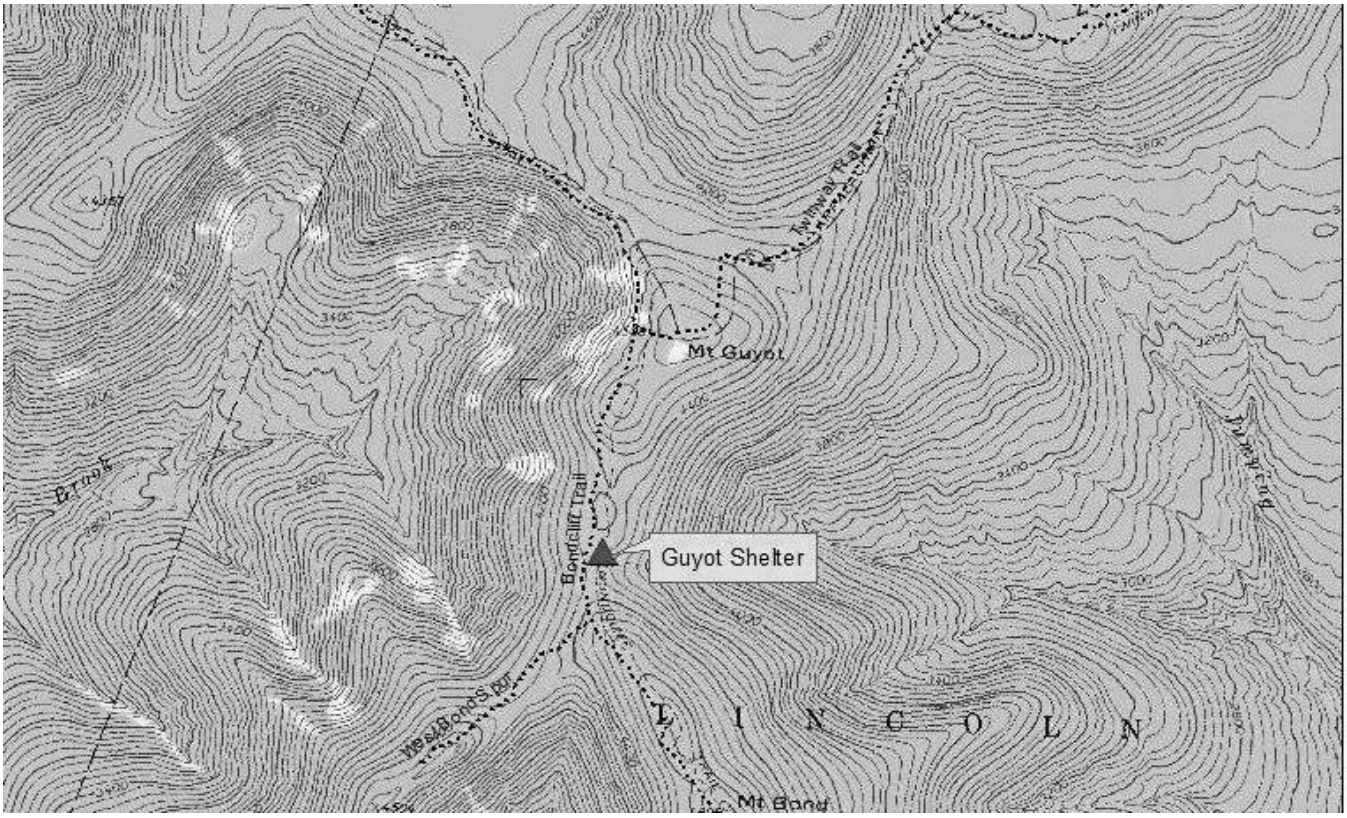


Figure 114. Guyot shelter location map. USGS 7.5' South Twin Mountain Quadrangle.

Figure 115. The original Guyot shelter, built in 1913 in the Log Shed style. Appalachian Mountain Club Archives, 5 Joy Street, Boston. Call number LS 37.06.

Figure 116. Guyot shelter (1939-1977) in Gabled style. Photo c.1965 in Appalachian Mountain Club shelter management files housed at Pinkham Notch Visitor Center, NH.

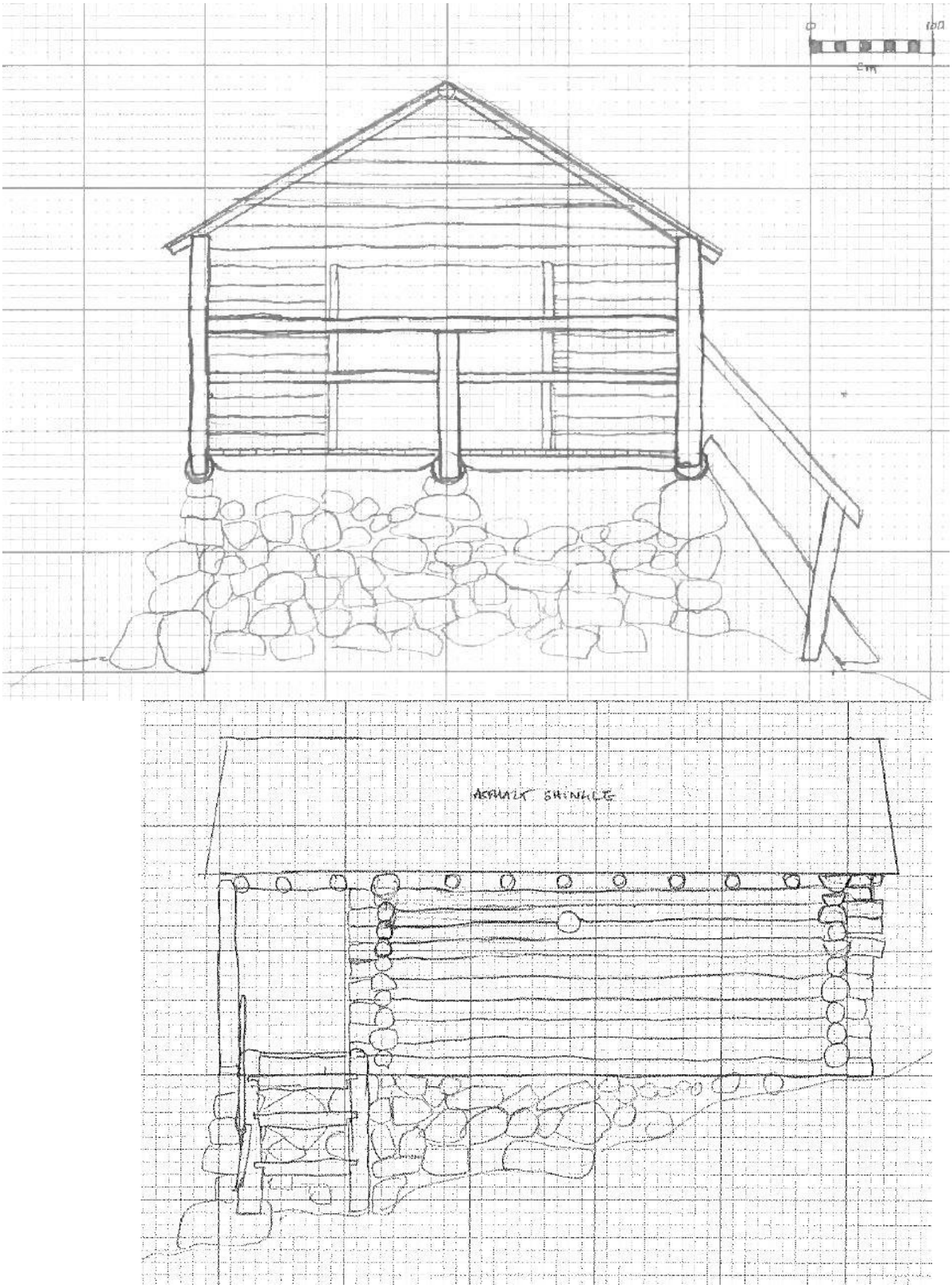


Figure 117. Guyot shelter drawings. Above: East (front) elevation. Below: North (side) elevation. August 23, 2012.

Figure 118. Guyot shelter, View SW. August 23, 2012.

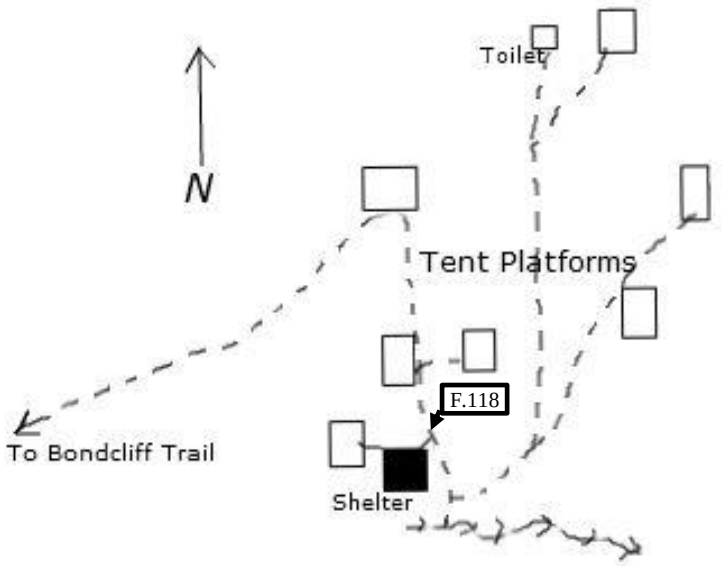


Figure 118a. Guyot shelter and tent site sketch map. Not to scale.

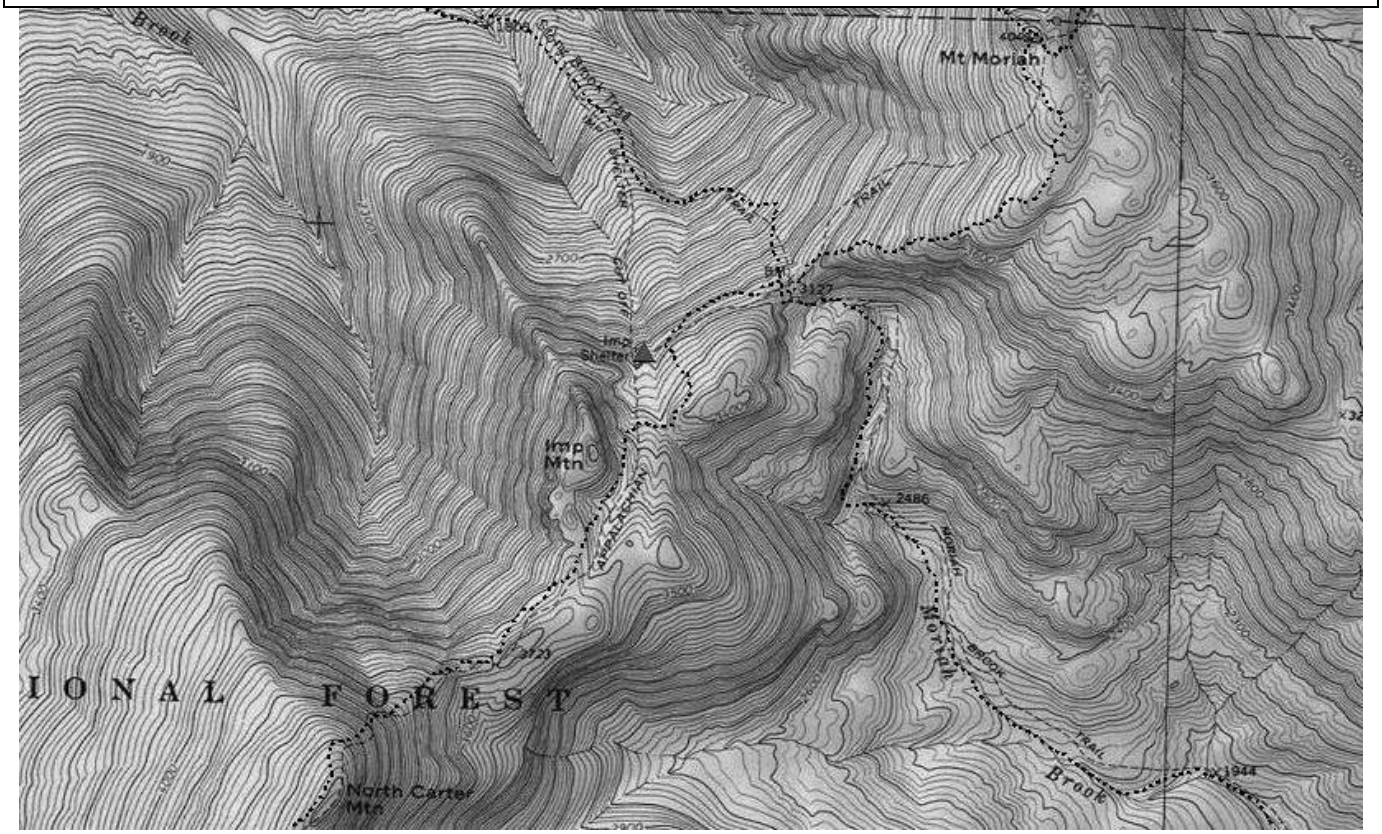


Figure 119. Imp shelter location map. USGS 7.5' Carter Dome Quadrangle.

Figure 120. Abandoned logging camp cabin used as Imp shelter, 1920-1927. Undated postcard.

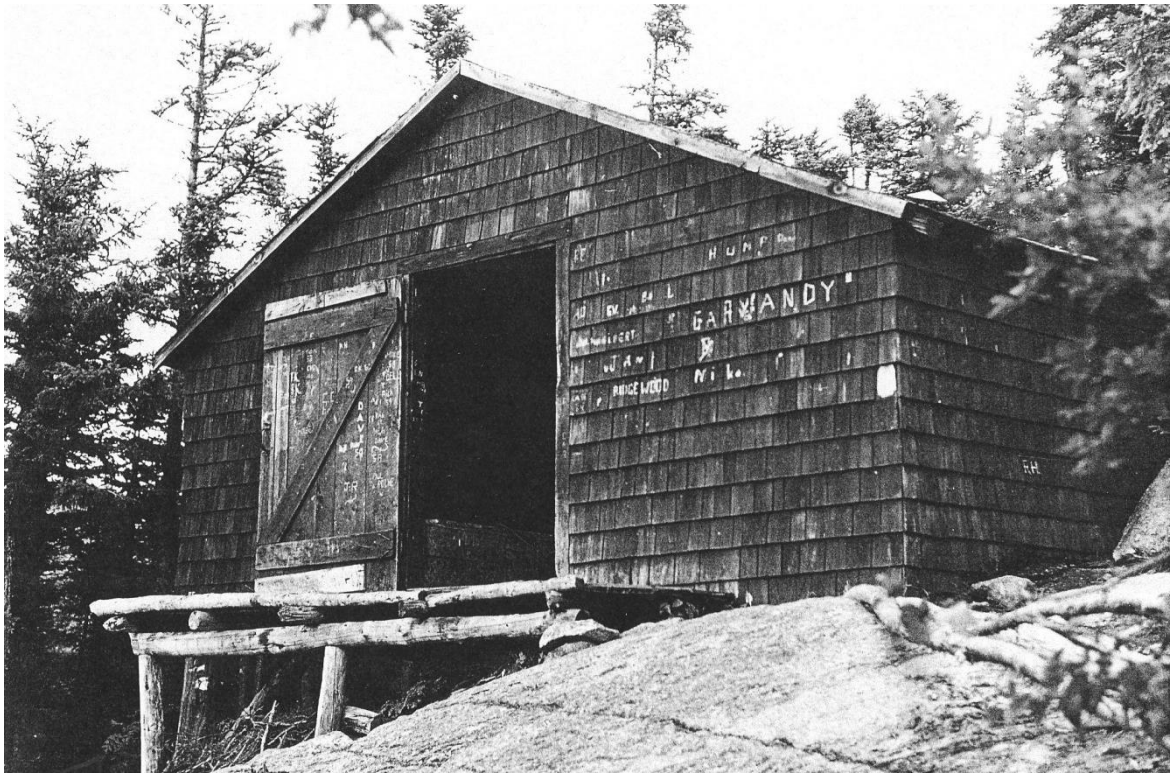


Figure 121. Imp shelter AMC cabin (1938-1980). Photo c.1965 in Appalachian Mountain Club shelter management files housed at Pinkham Notch Visitor Center, NH.

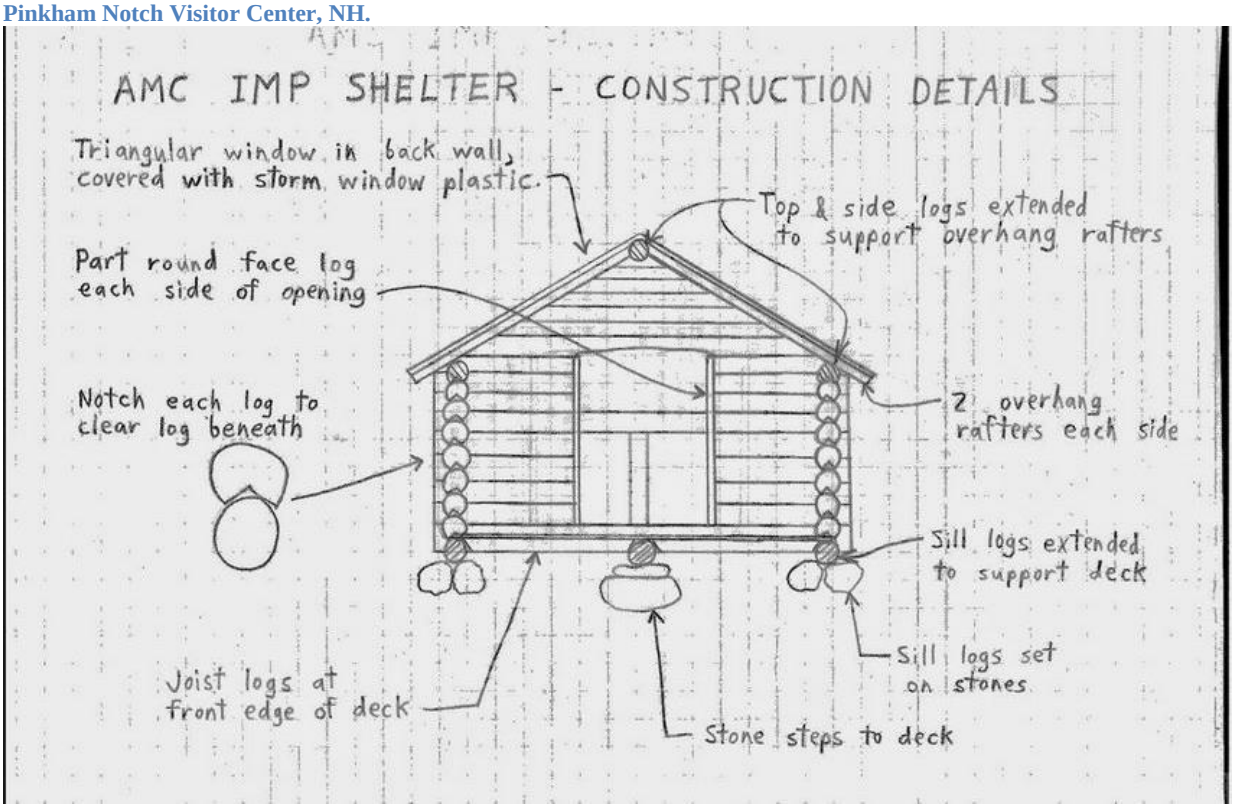


Figure 122. Imp shelter construction details for 1980 shelter, in Appalachian Mountain Club shelter management files housed at Pinkham Notch Visitor Center, NH.

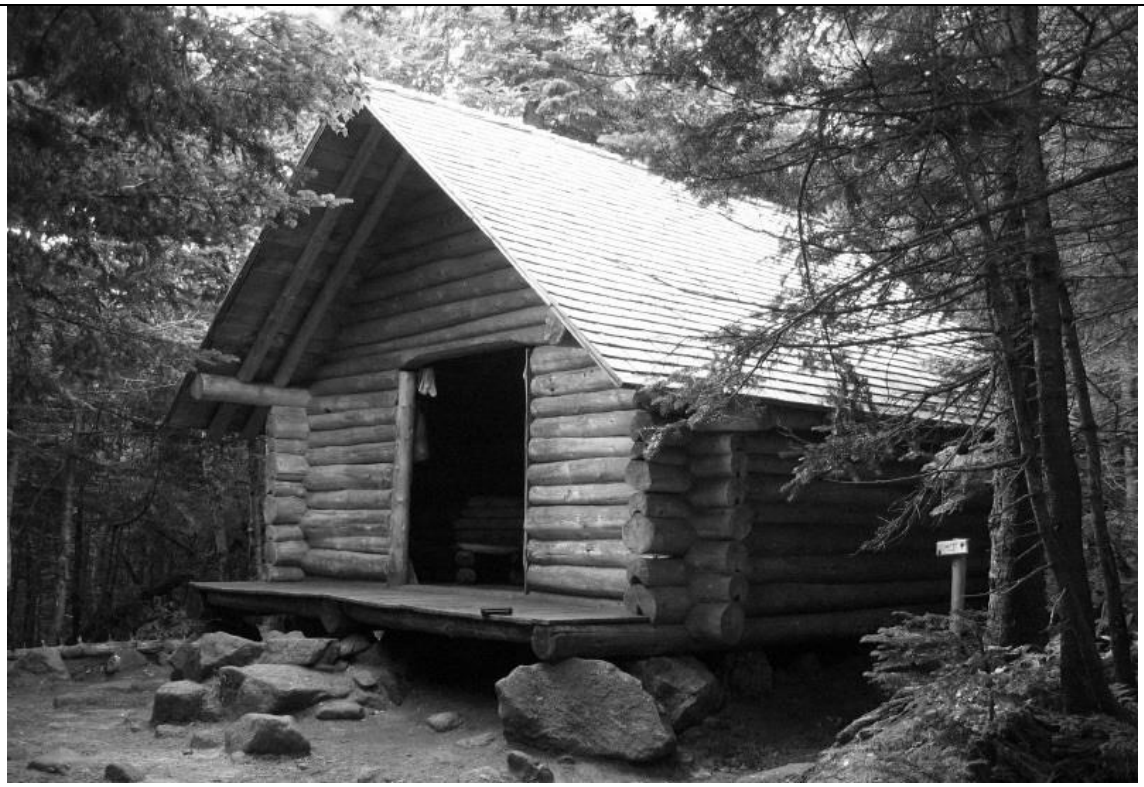


Figure 123. Imp shelter, constructed 1980. Photo by Dennis Paul Himes, July 2008. http://www.cookhimes.us/dennis/traillog/20080712/20080712013.htm, accessed 12/31/2015.

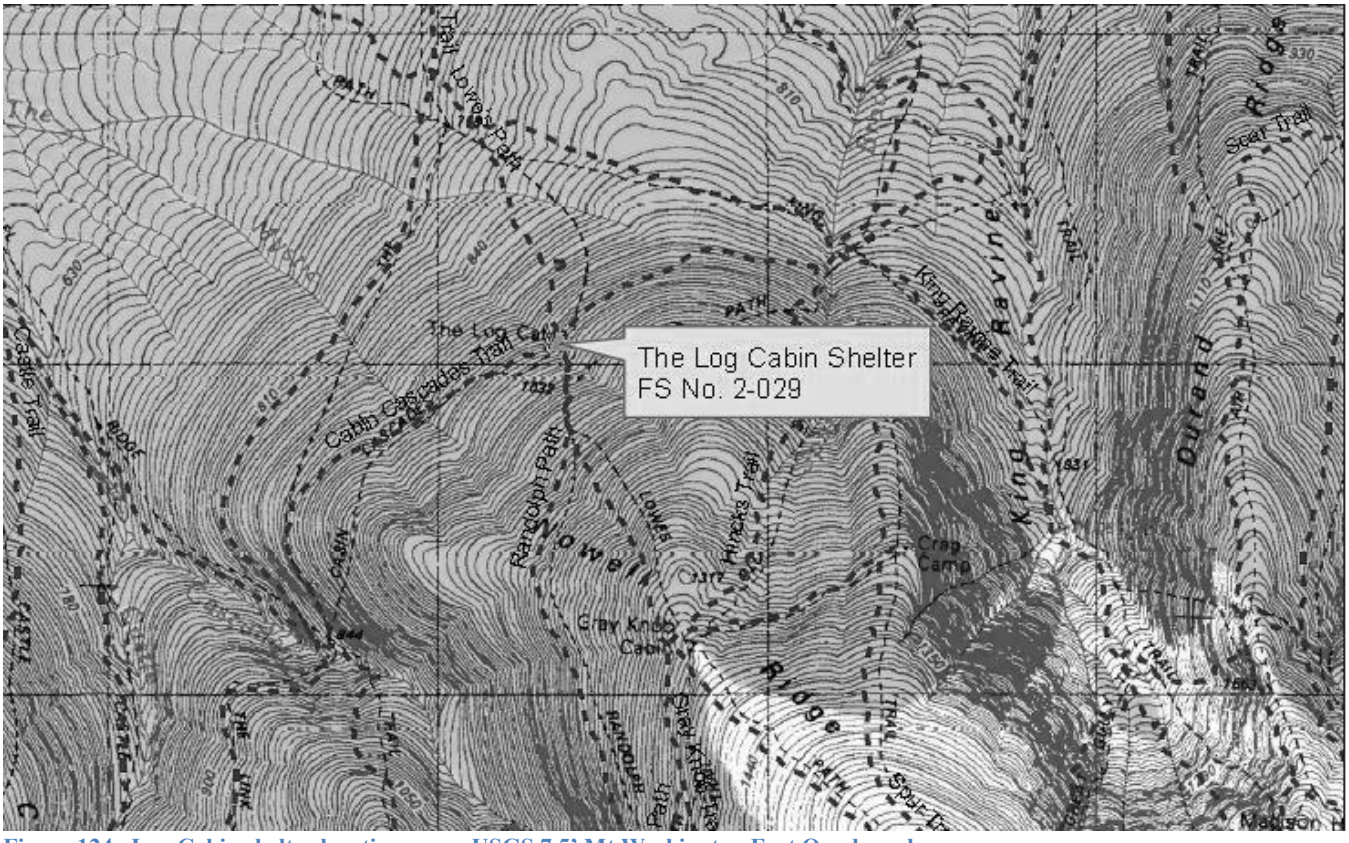


Figure 124. Log Cabin shelter location map. USGS 7.5' Mt Washington East Quadrangle.

Figure 125. The Log Cabin, with W.G. Nowell in front, 1890s. Photo by Guy Shorey in the RMC archives.

Figure 126. Log Cabin shelter. View NW. May 31, 2012.

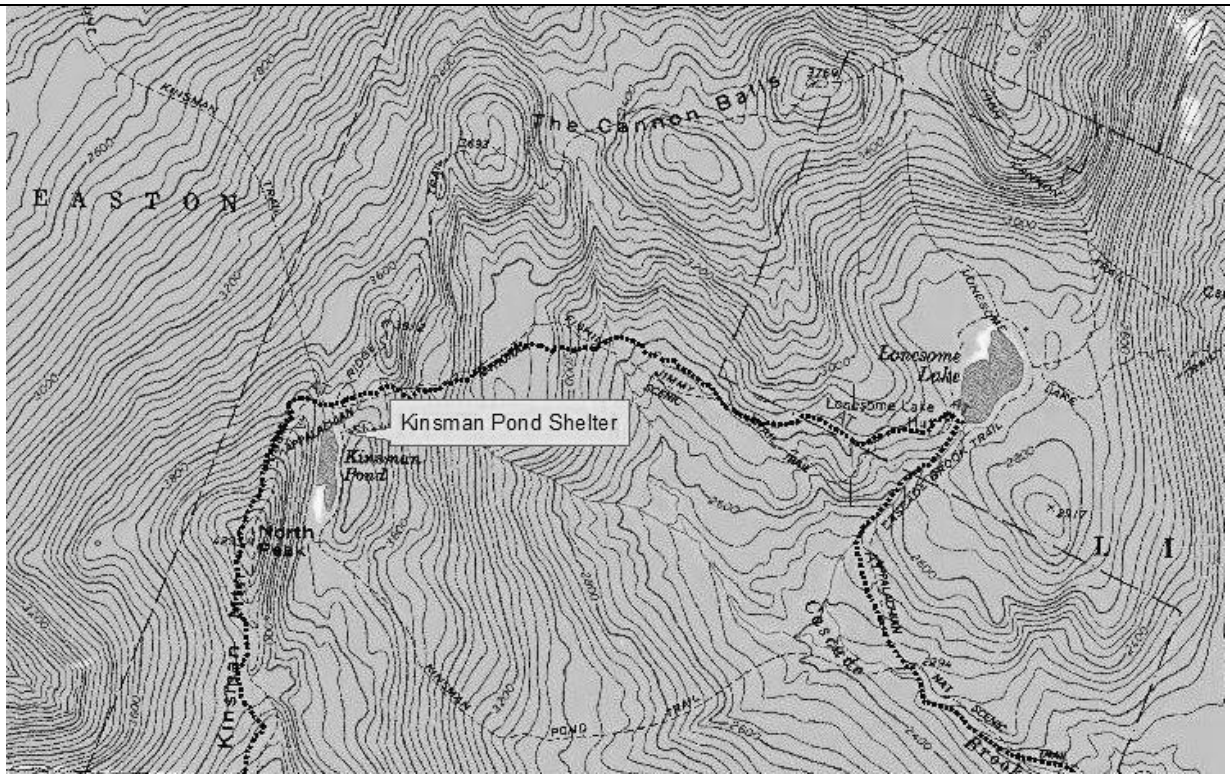


Figure 127. Kinsman Pond shelter location map. USGS 7.5' Franconia Quadrangle.

Figure 128. Kinsman Pond shelter (1921-1966). Photo taken in the 1950s by Clyde Smith.

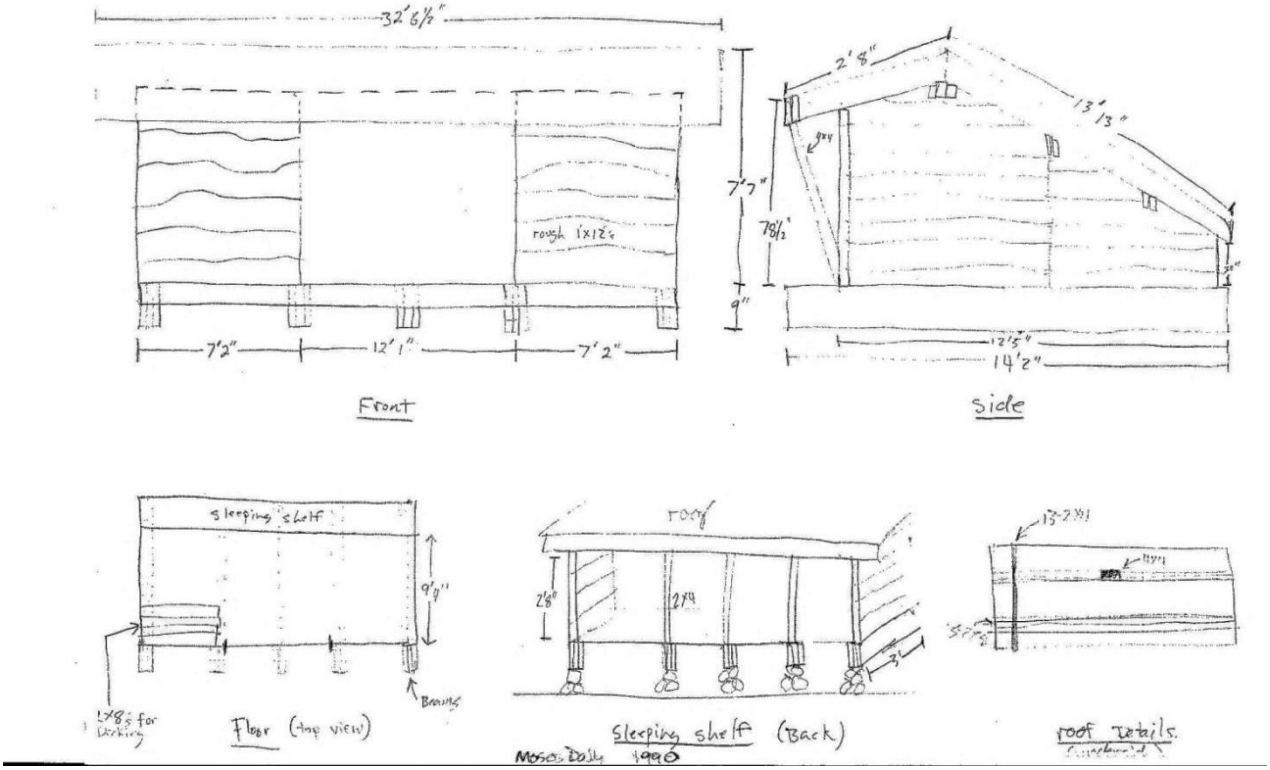


Figure 129. Drawing of Kinsman Pond shelter (1966-2007) by Moses Daly, 1990. Appalachian Mountain Club shelter management files housed at Pinkham Notch Visitor Center, NH.

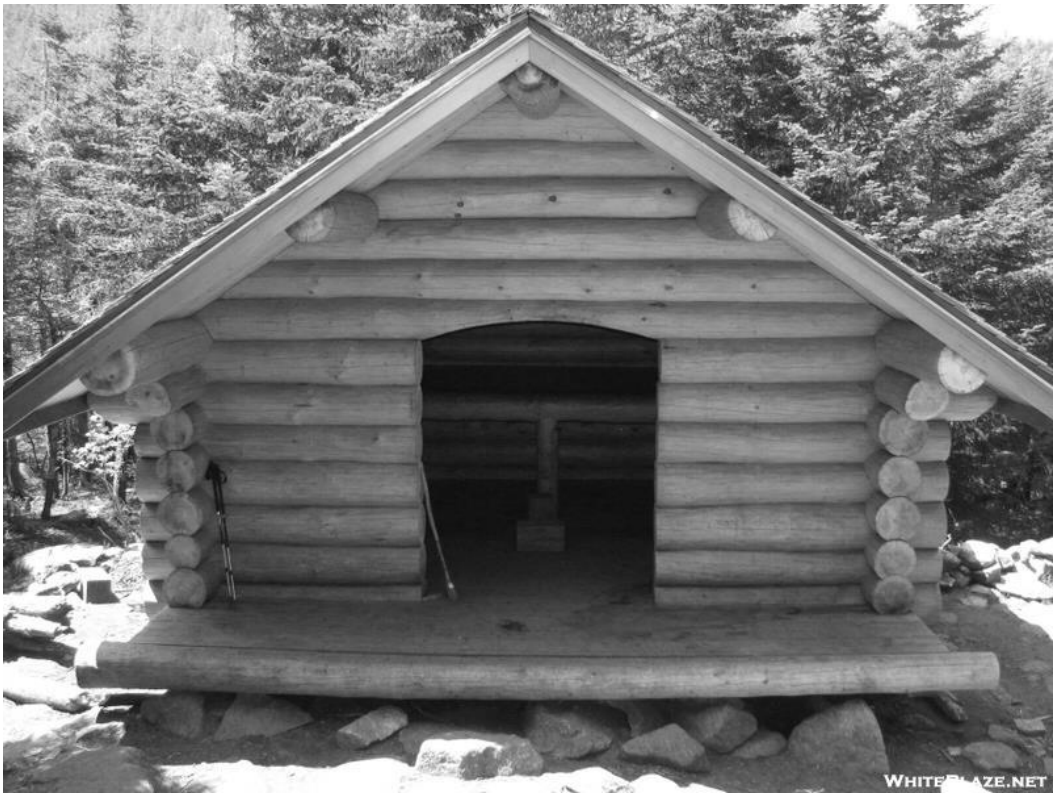


Figure 130. Kinsman Pond shelter, built 2007. Photo dated May 31, 2010 from WhiteBlaze,net, http://www.whiteblaze.net/forum/vbg/showimage.php?i=41119. Accessed March 10, 2015.

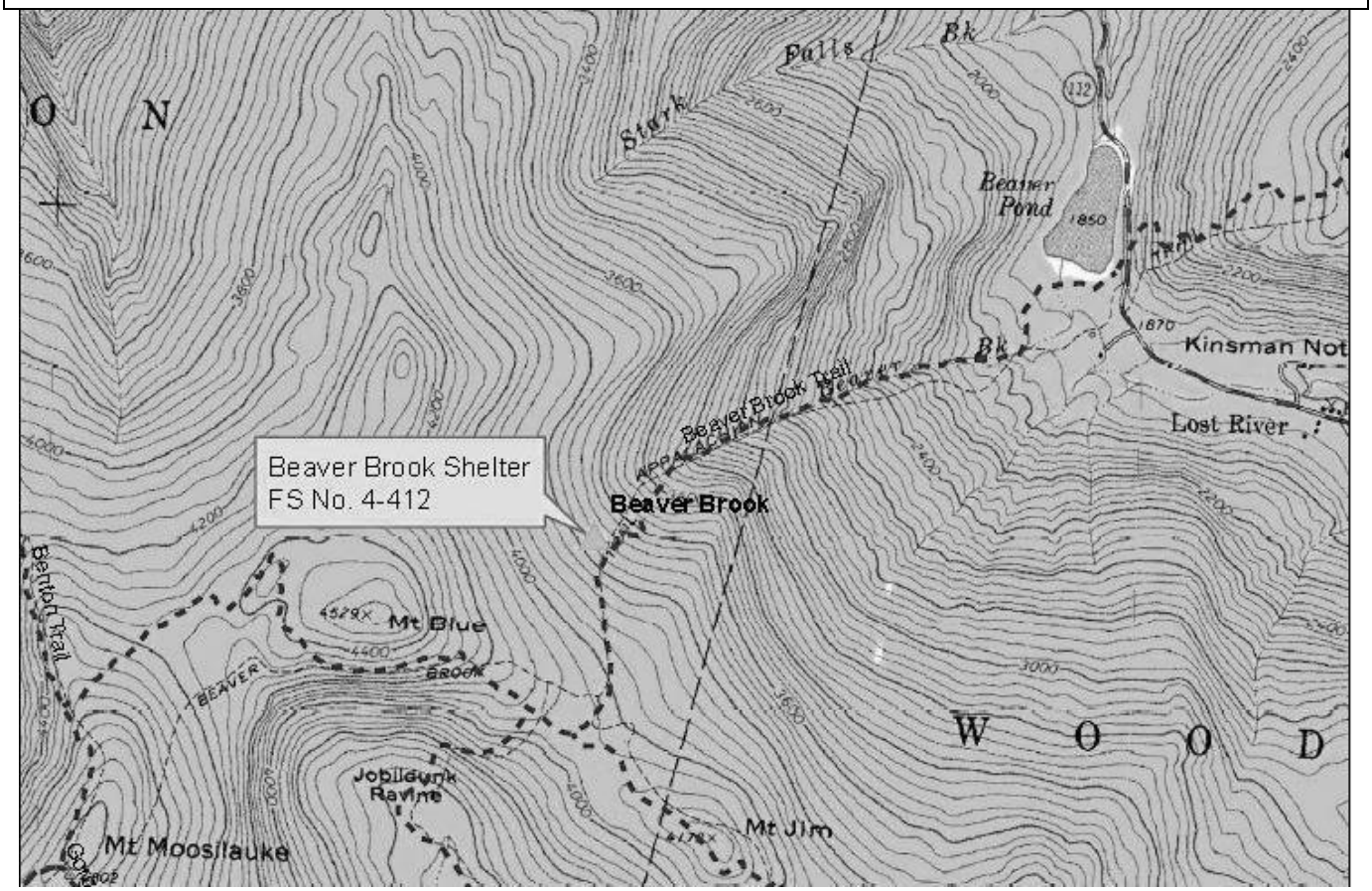


Figure 131. Beaver Brook shelter location map. USGS 7.5' Mt. Moosilauke Quadrangle.

Figure 132. Beaver Brook shelter (1957-1993). WMNF photo dated 1992 from WMNF CRRR 1993-04-01.

Figure 133. Beaver Brook shelter. View NW. May 26, 2012.

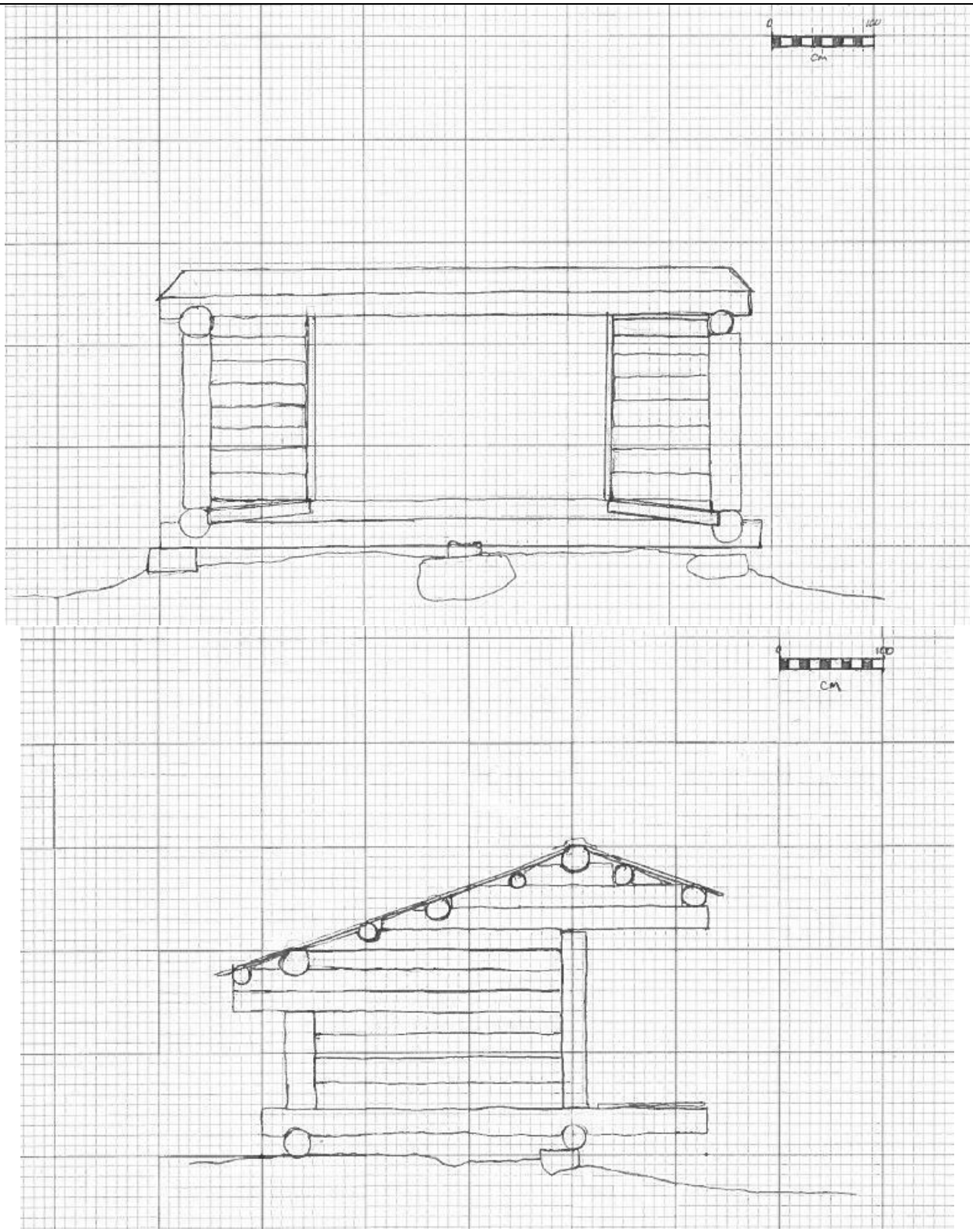


Figure 134. Beaver Brook shelter drawing. Above: East (front) elevation. Below: South side elevation. May 23, 2012.

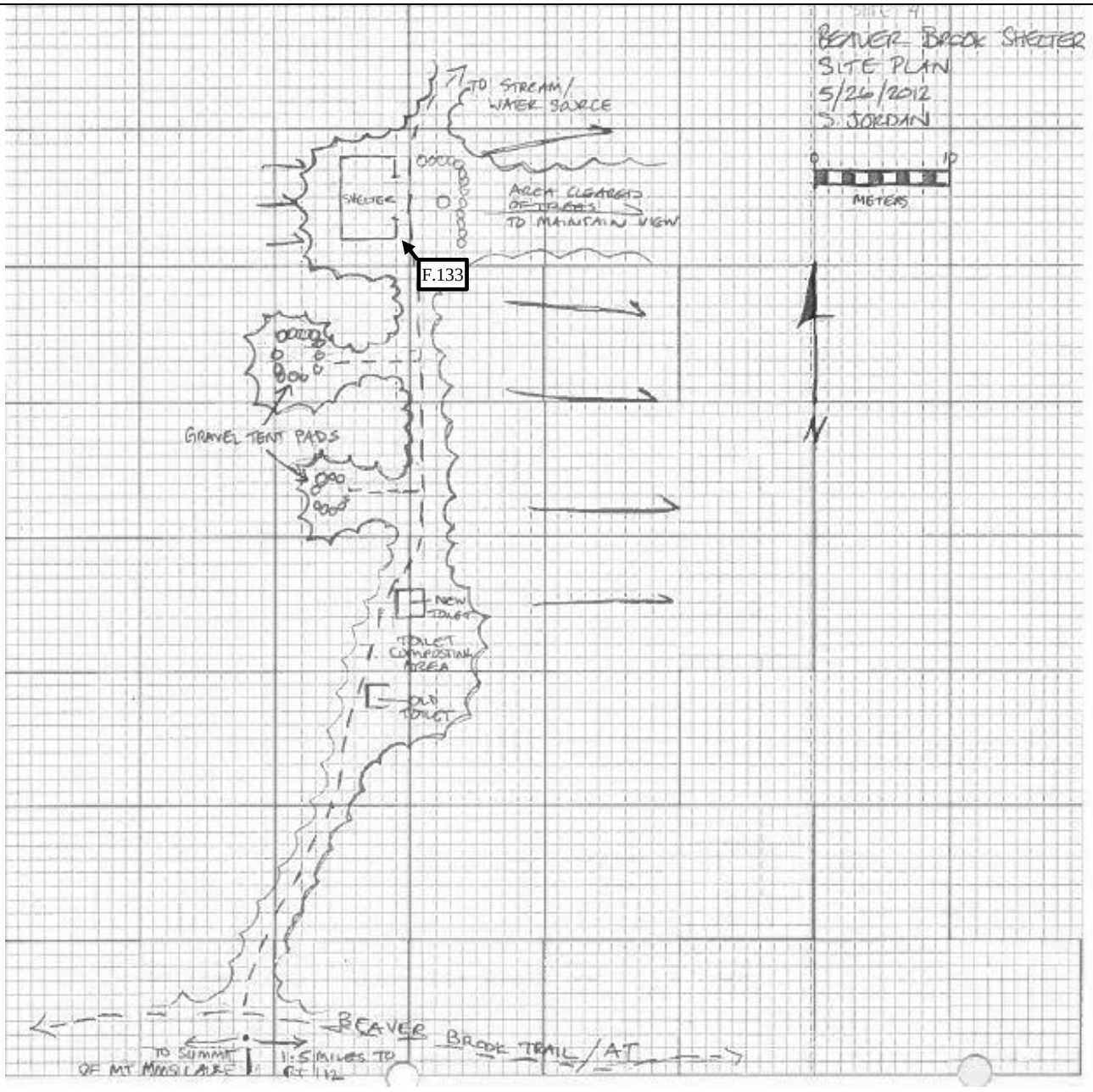


Figure 135. Beaver Brook shelter sketch map. May 26, 2012.

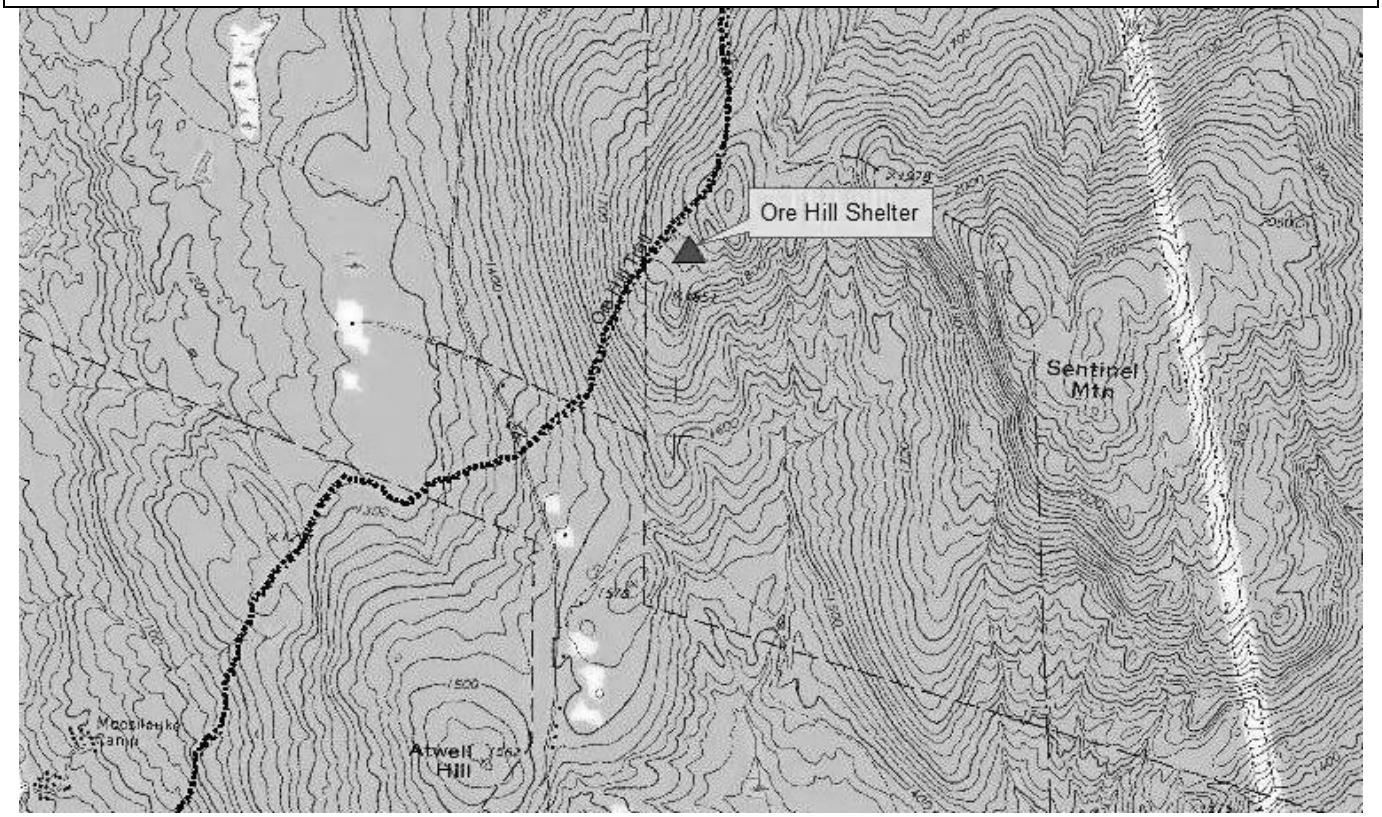


Figure 136. Ore Hill shelter location map. USGS 7.5' Warren Quadrangle.

Figure 137. Ore Hill shelter. August 6, 2005. Photo courtesy of Susan Schibanoff.

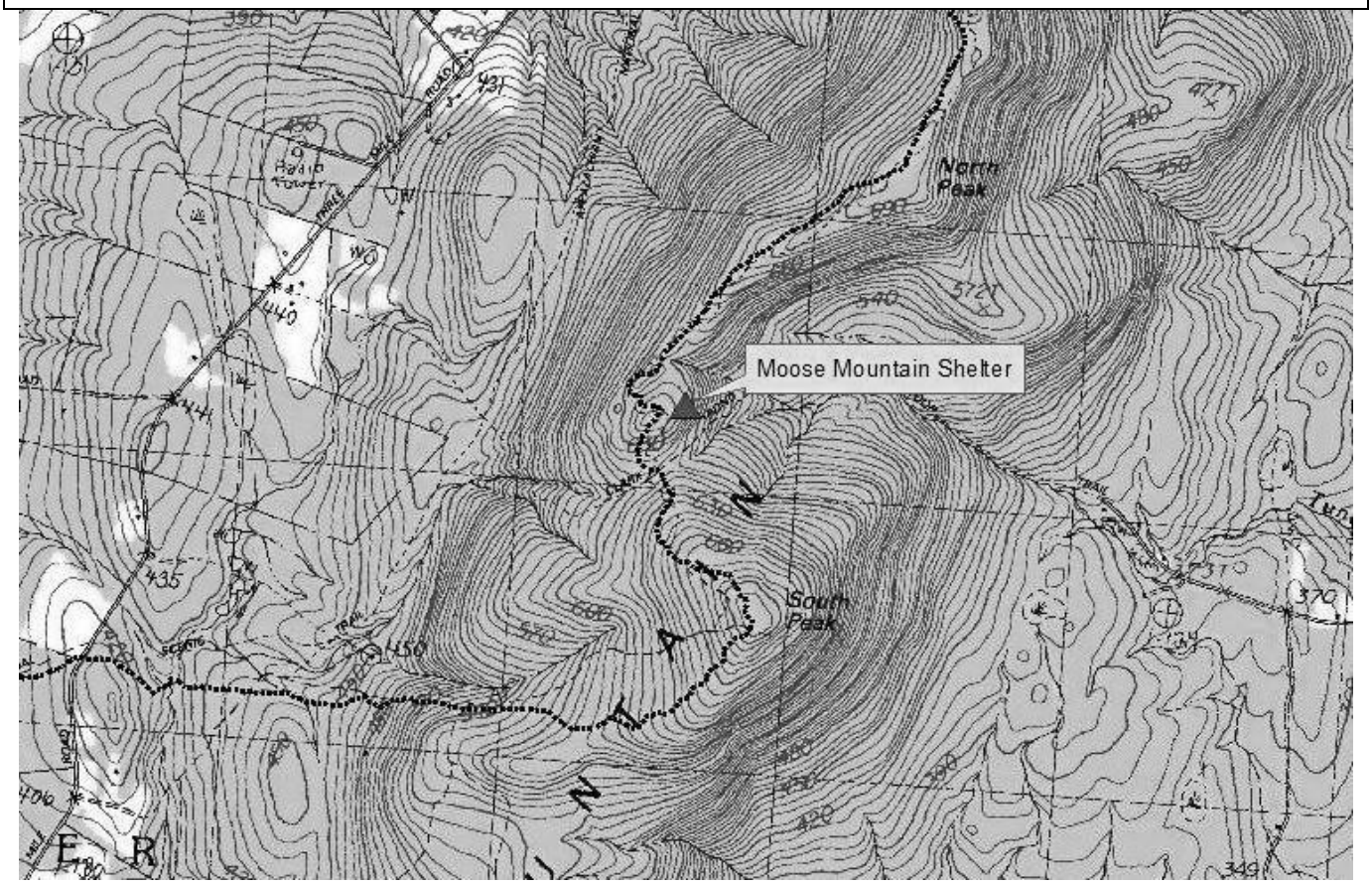


Figure 138. Moose Mountain shelter location map. USGS 7.5' Canaan Quadrangle.

Figure 139. Moose Mountain shelter. Photo from WhiteBlaze,net, http://www.whiteblaze.net/forum/vbg/showimage.php?i=3871&c=628. Accessed March 10, 2015.

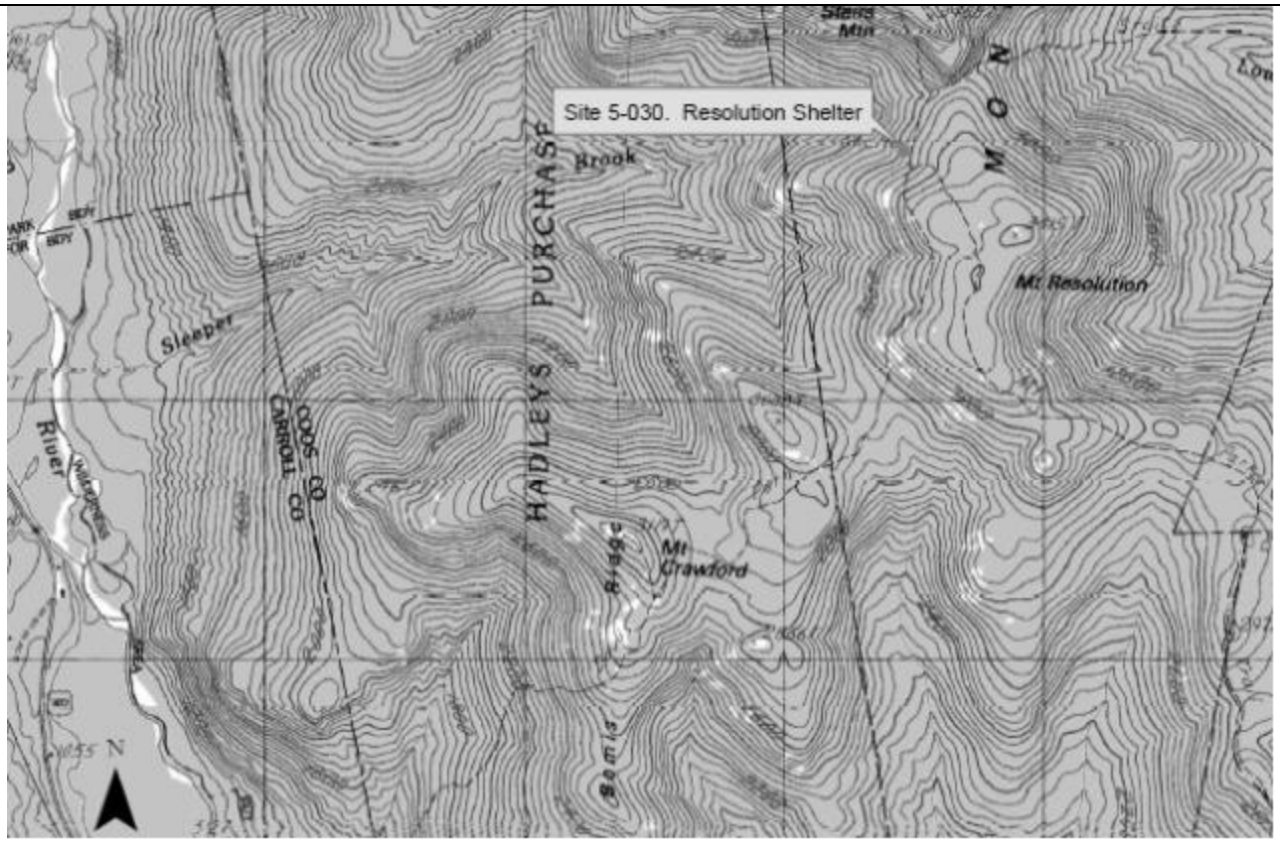


Figure 140. Resolution shelter location map. USGS 7.5' Stairs Mountain Quadrangle.

Figure 141. First Resolution Shelter, 1912-1932. Lantern slide taken c. 1912 by Ralph Larrabee. From the collection of the Appalachian Mountain Club, 5 Joy St, Boston, MA.

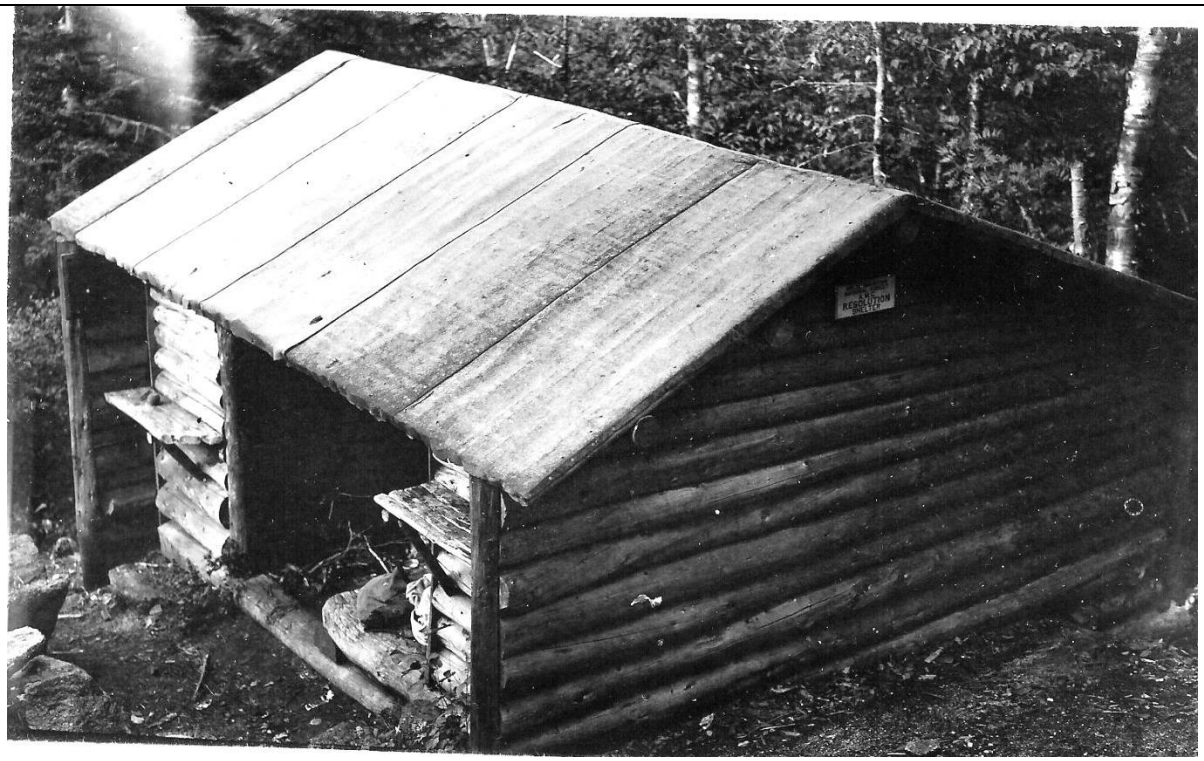


Figure 142. Resolution shelter. View NW. Undated postcard.

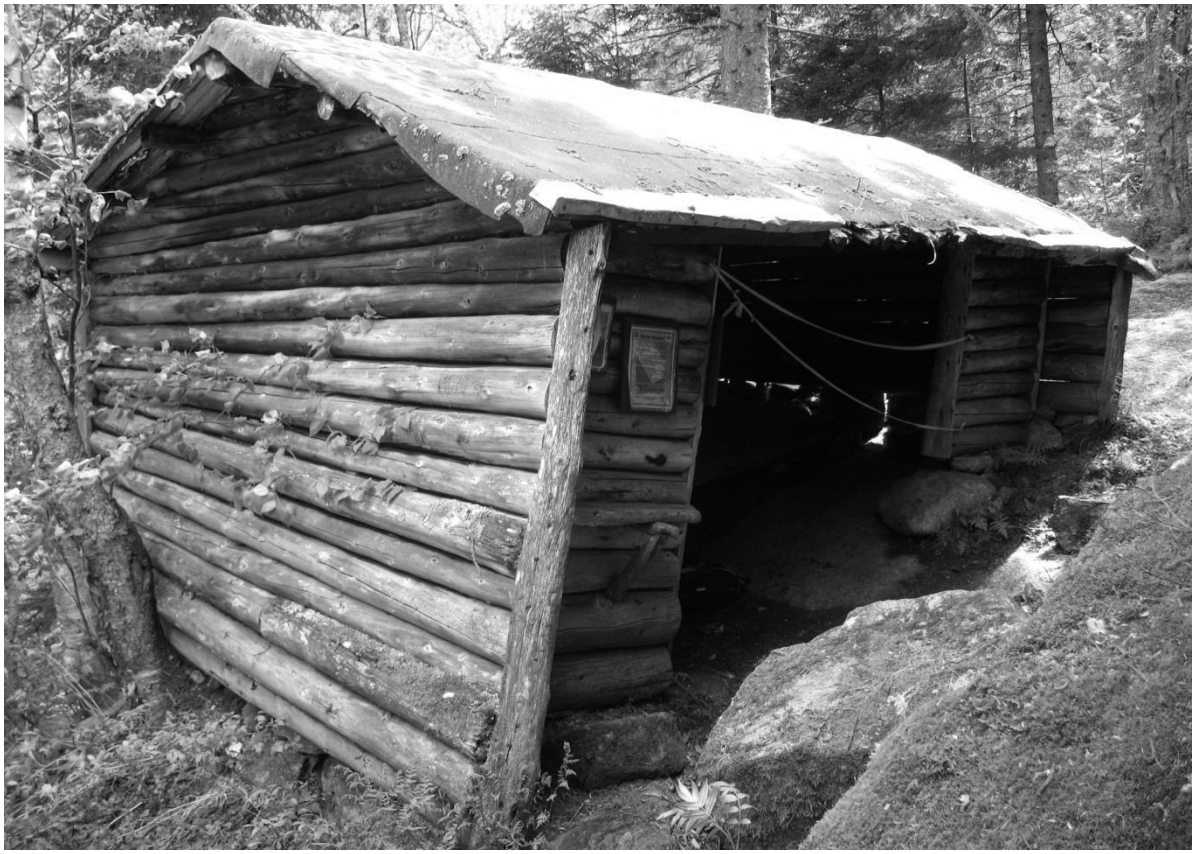


Figure 143. Resolution shelter. View SE. June 3, 2011.

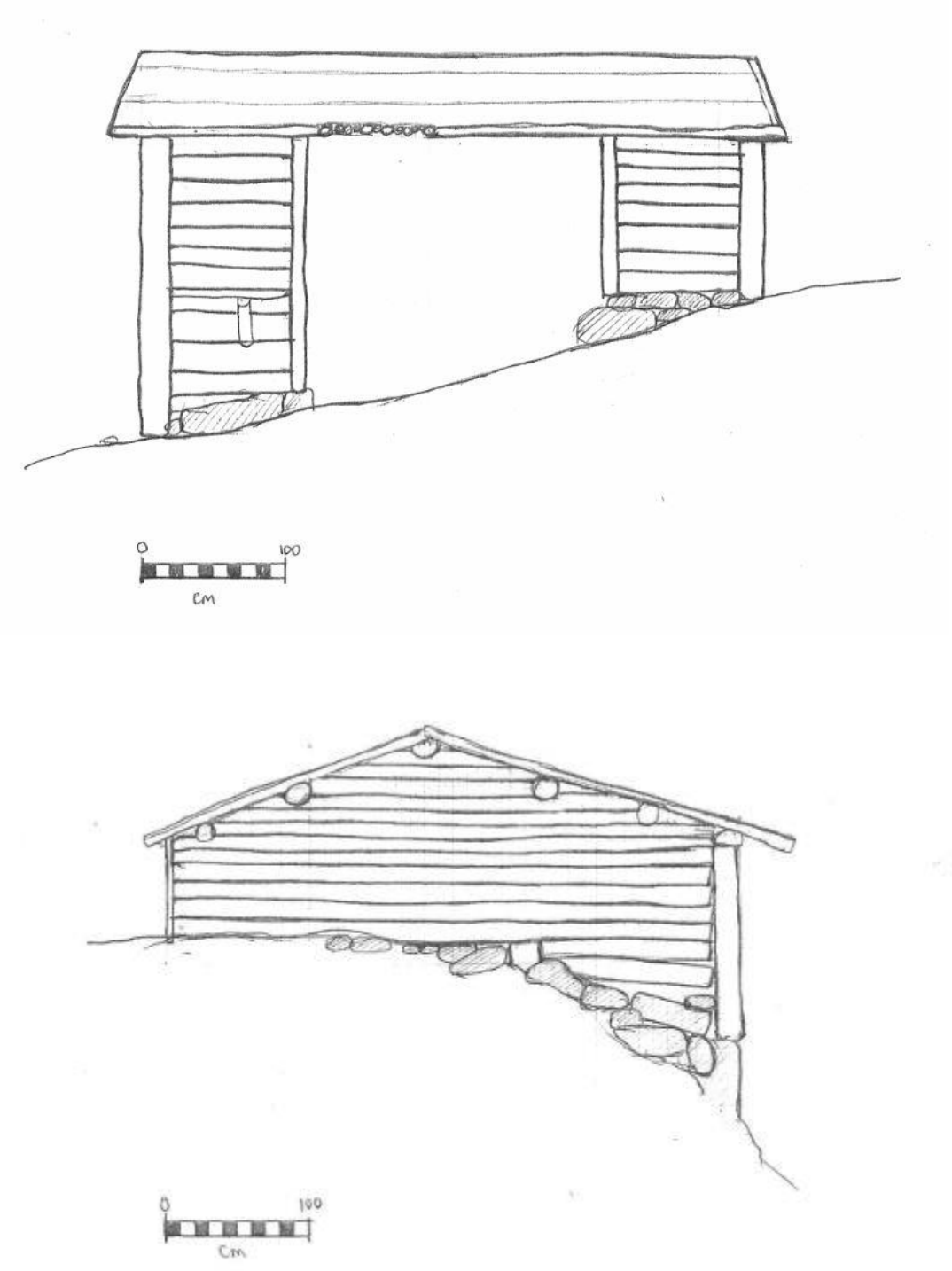


Figure 144. Resolution shelter drawings. Above: West (front) elevation. Below: South side elevation. June 3, 2011.

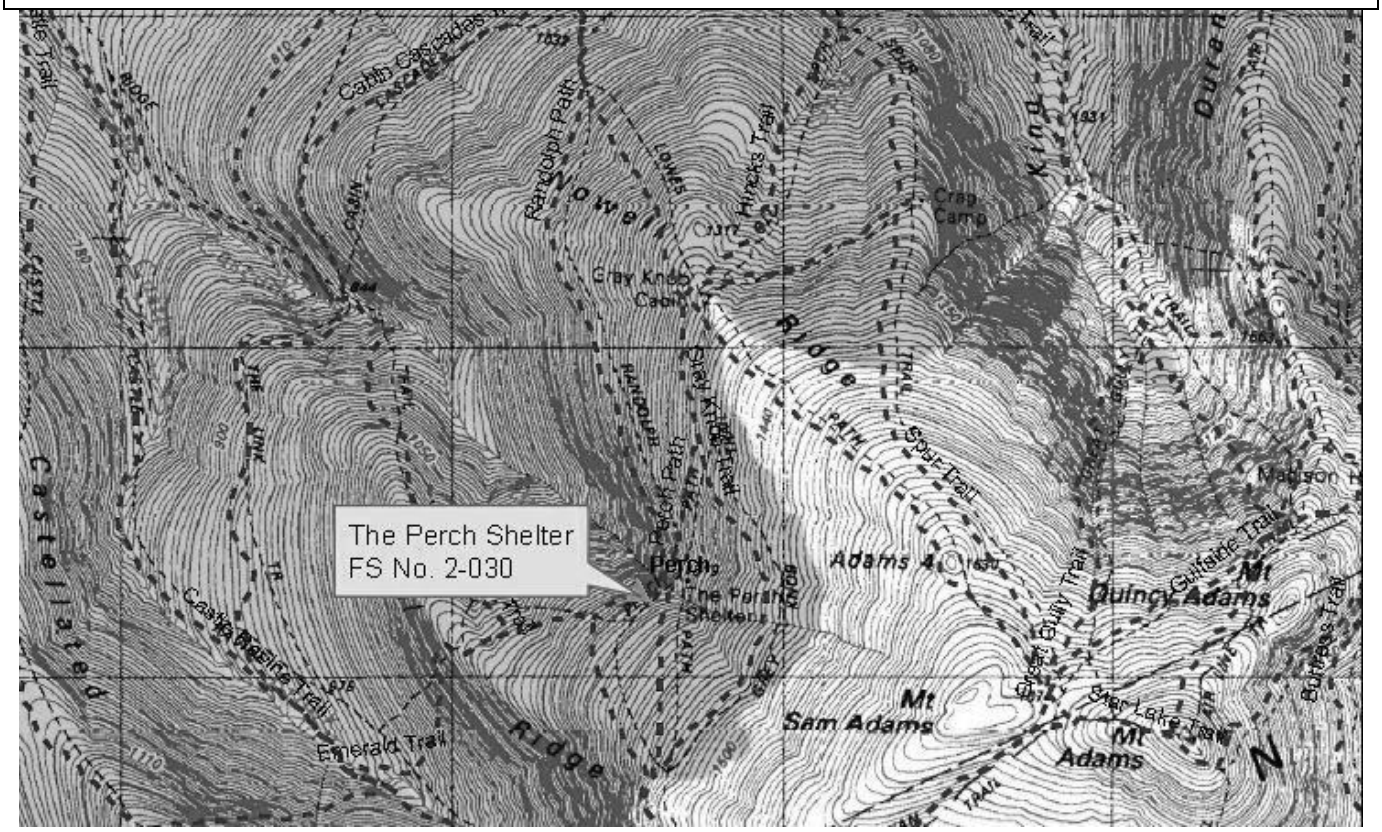


Figure 145. The Perch shelter location map. USGS 7.5' Mt Washington East Quadrangle.

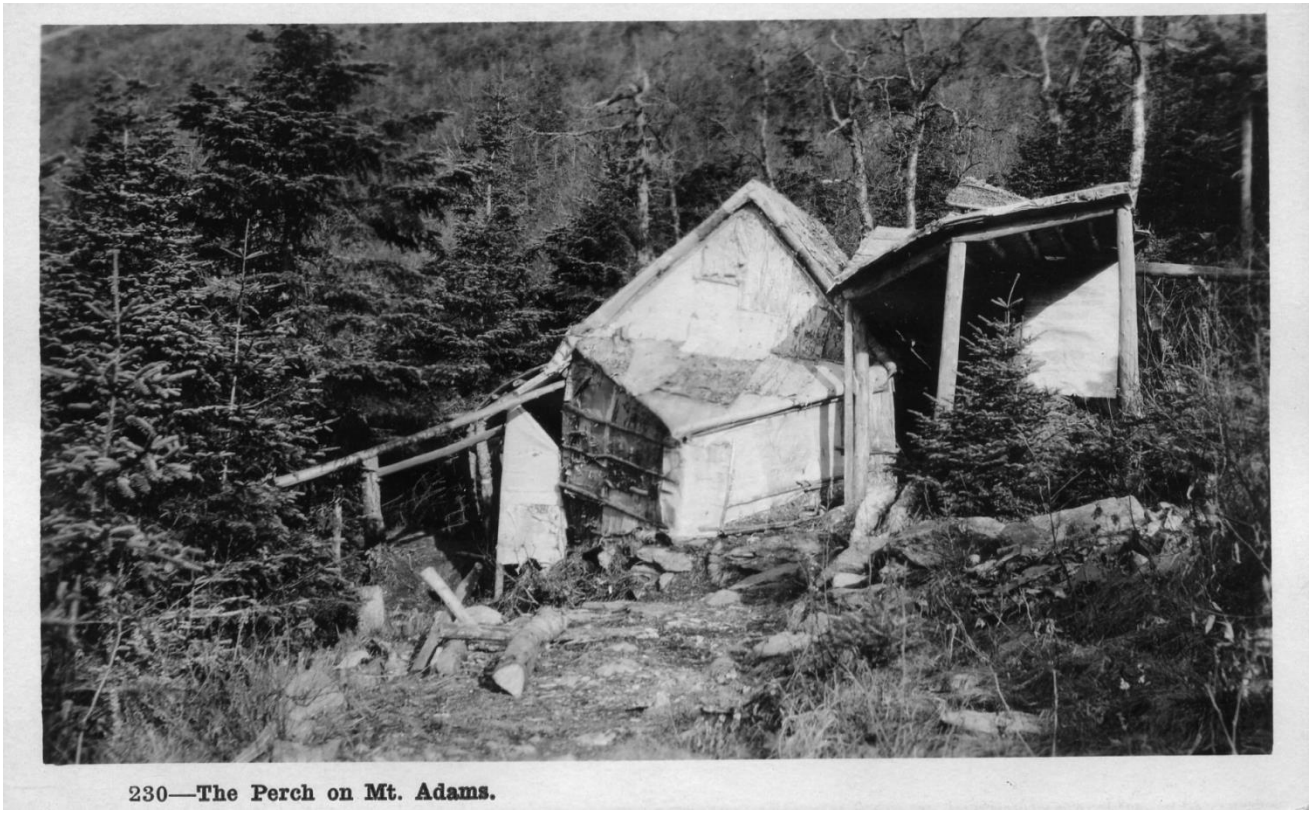


Figure 146. The Perch shelter (1893-1938). Undated postcard, likely from the Guy Shorey studio.

Figure 147. The newly-constructed Perch in 1948. Photo from Appalachia Vol. XXVII (2), facing page 229.

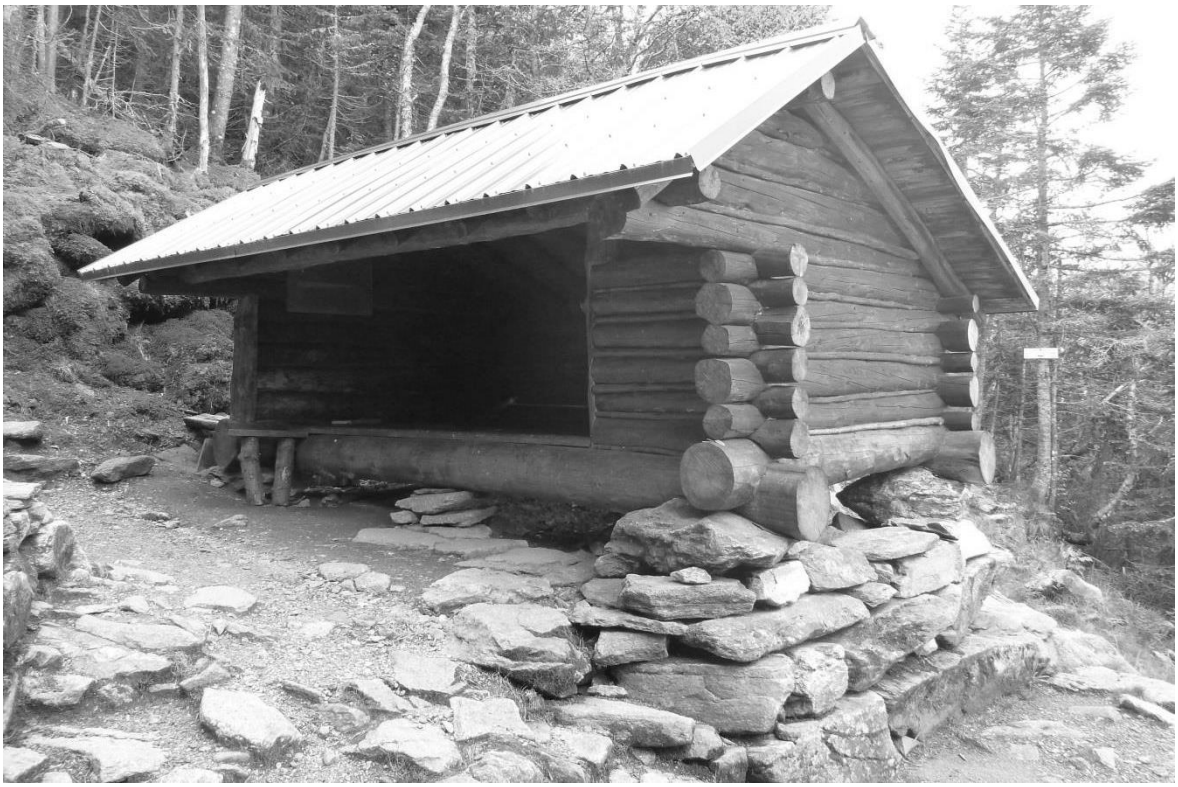


Figure 148. The Perch shelter. View SW. May 31, 2012.

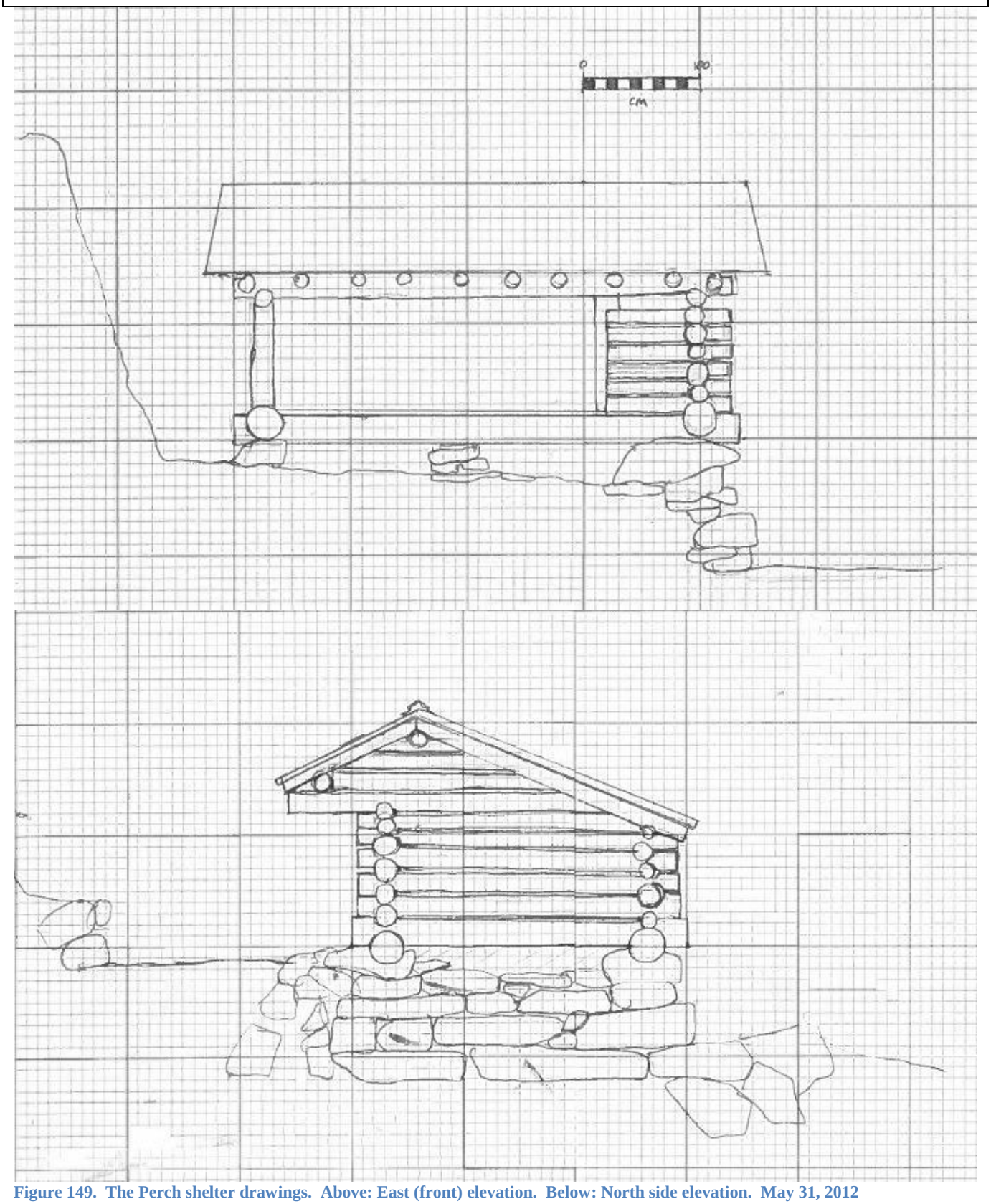


Figure 149. The Perch shelter drawings. Above: East (front) elevation. Below: North side elevation. May 31, 2012

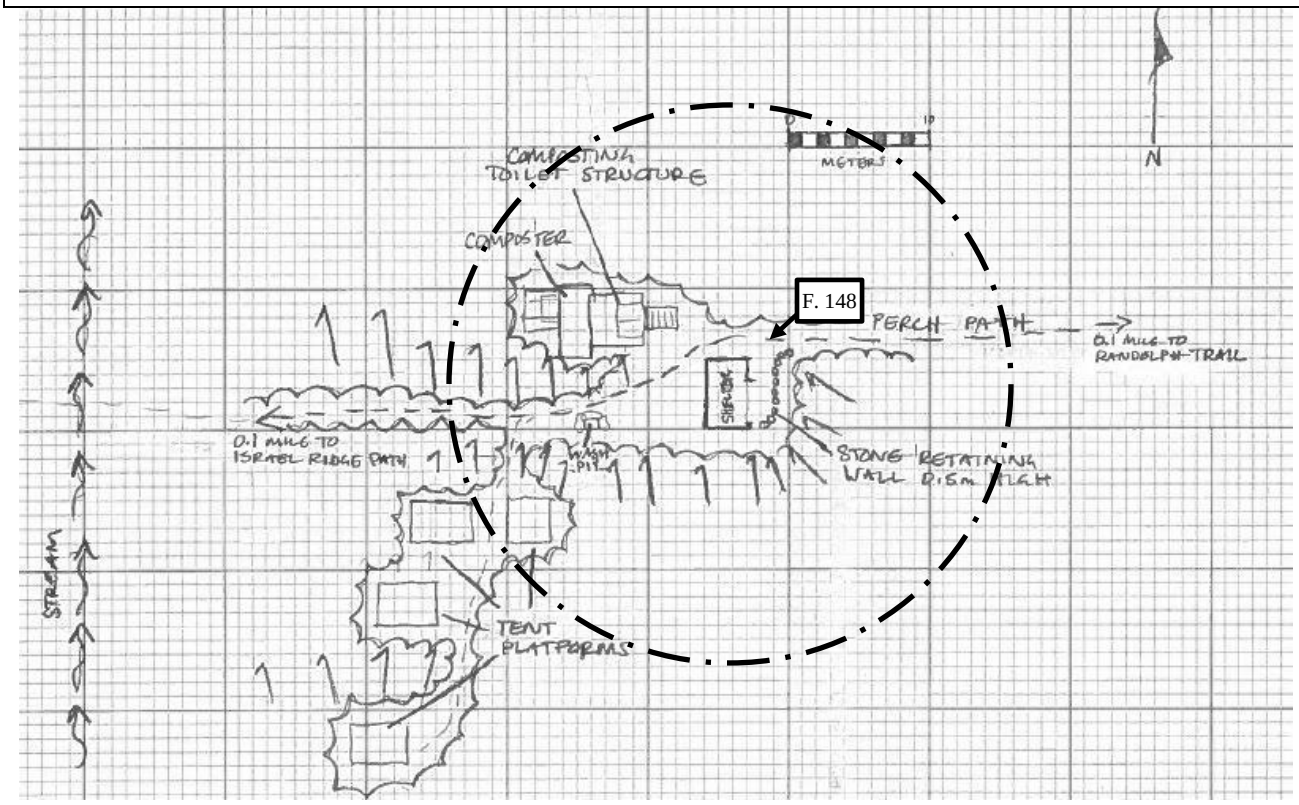


Figure 150. The Perch shelter sketch map. Dashed circle indicates approximate location of 20m radius site boundary.

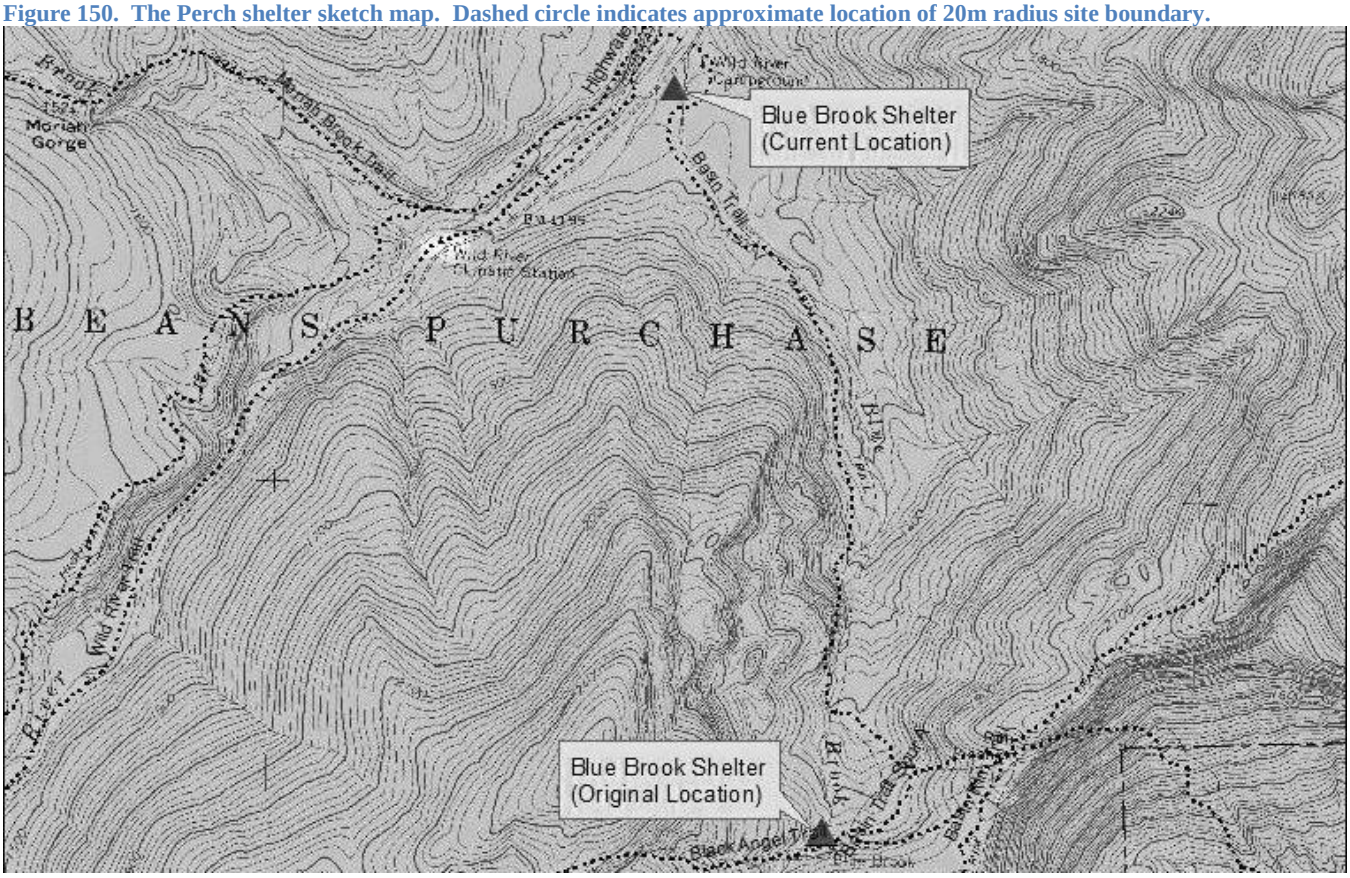


Figure 151. Blue Brook shelter location map. USGS 7.5' Wild River Quadrangle.

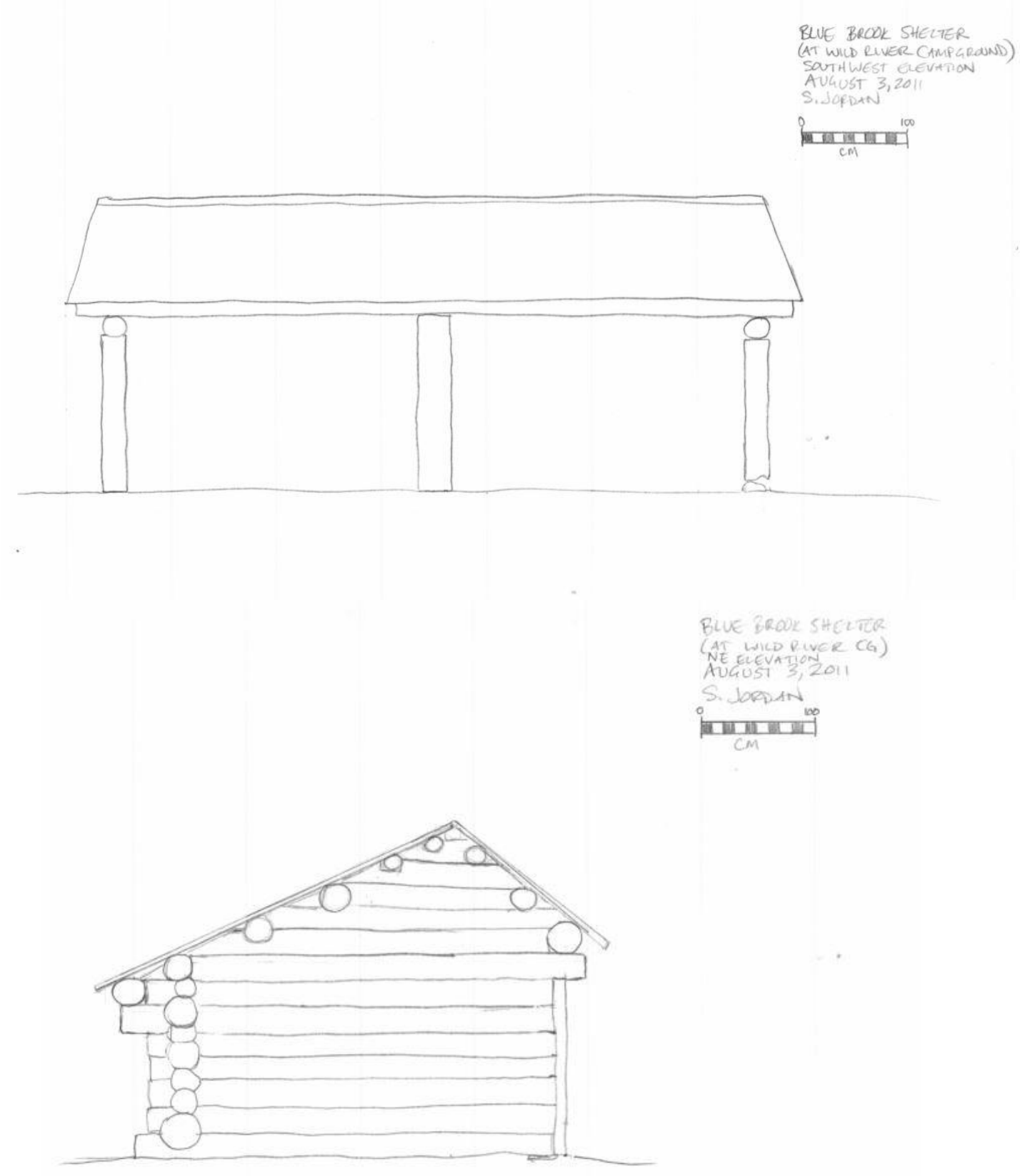


Figure 152. Blue Brook shelter drawings. Above: Southwest (front) elevation. Below: Northeast side elevation. August 3, 2011.

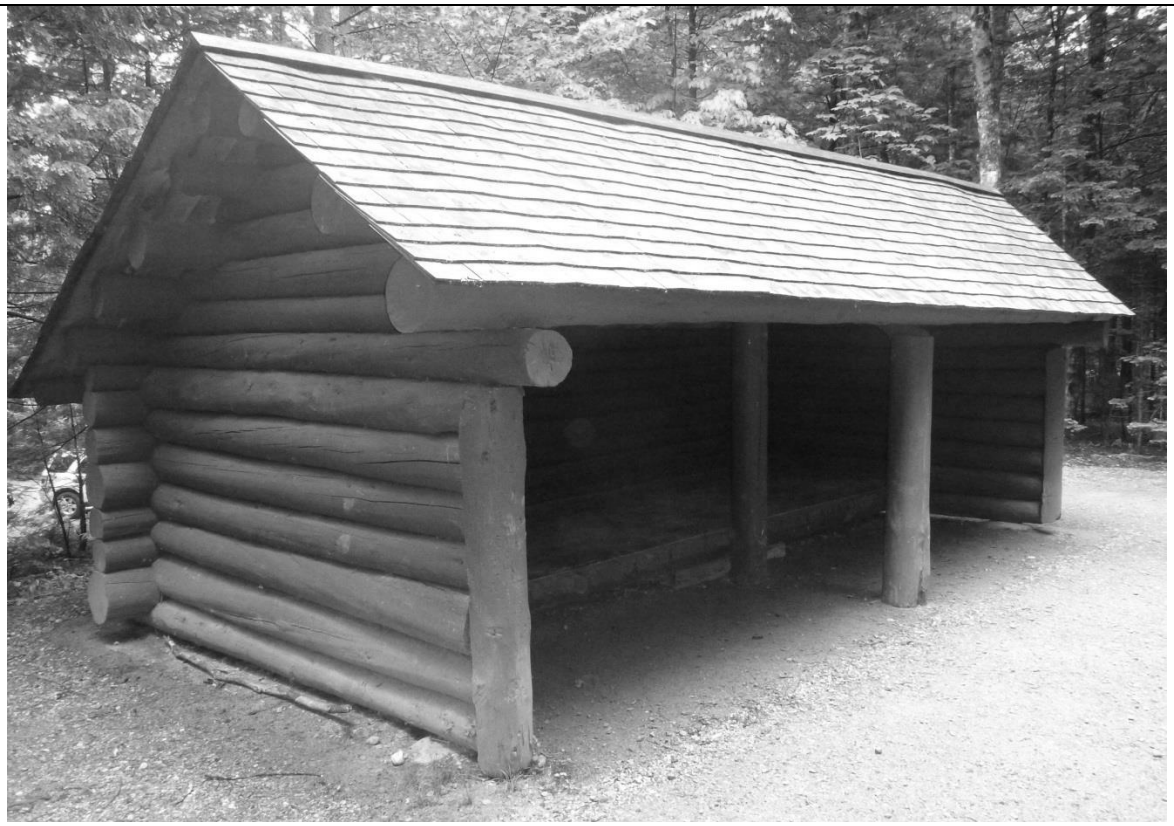


Figure 153. Blue Brook shelter. View NE. June 12, 2014.

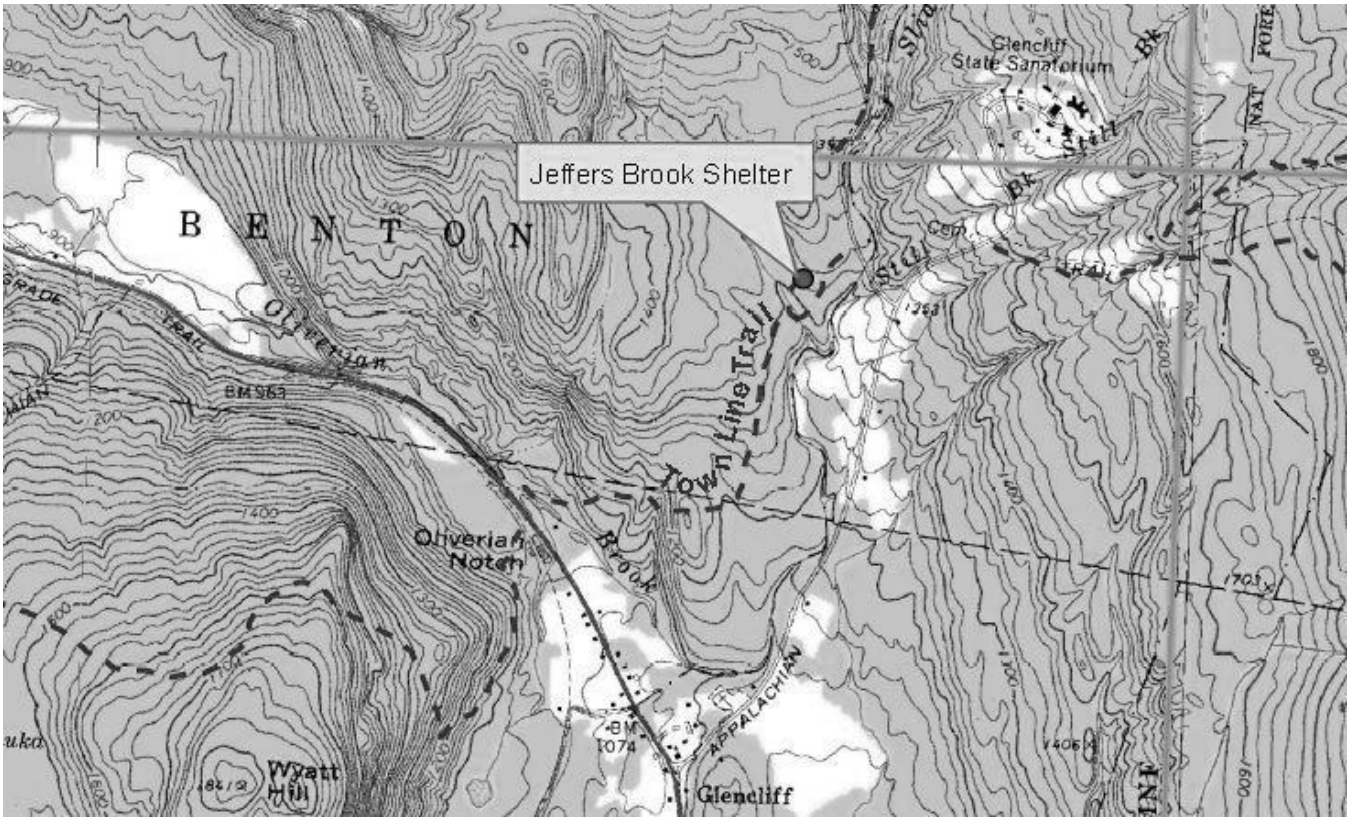


Figure 154. Jeffers Brook shelter location map. USGS 7.5' Warren Quadrangle.

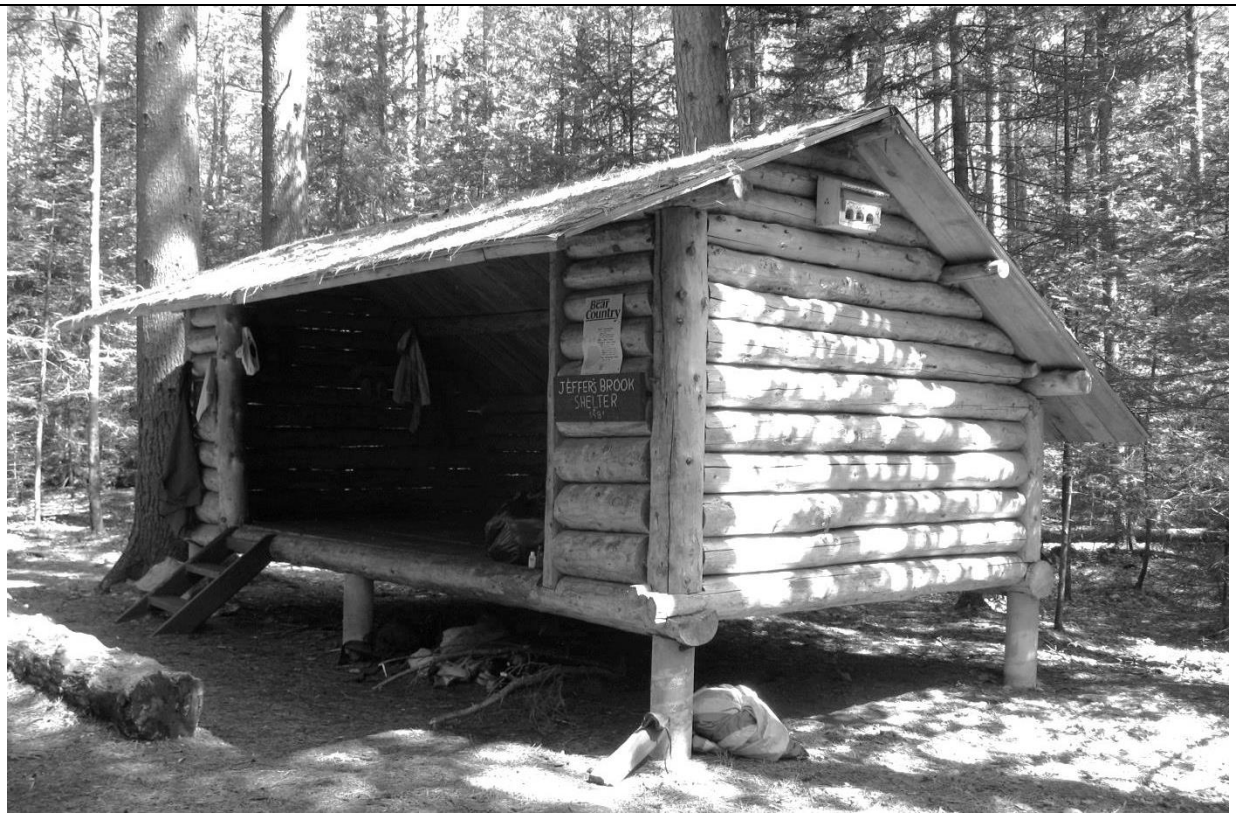


Figure 155. Jeffers Brook shelter. View NE. May 25, 2011.

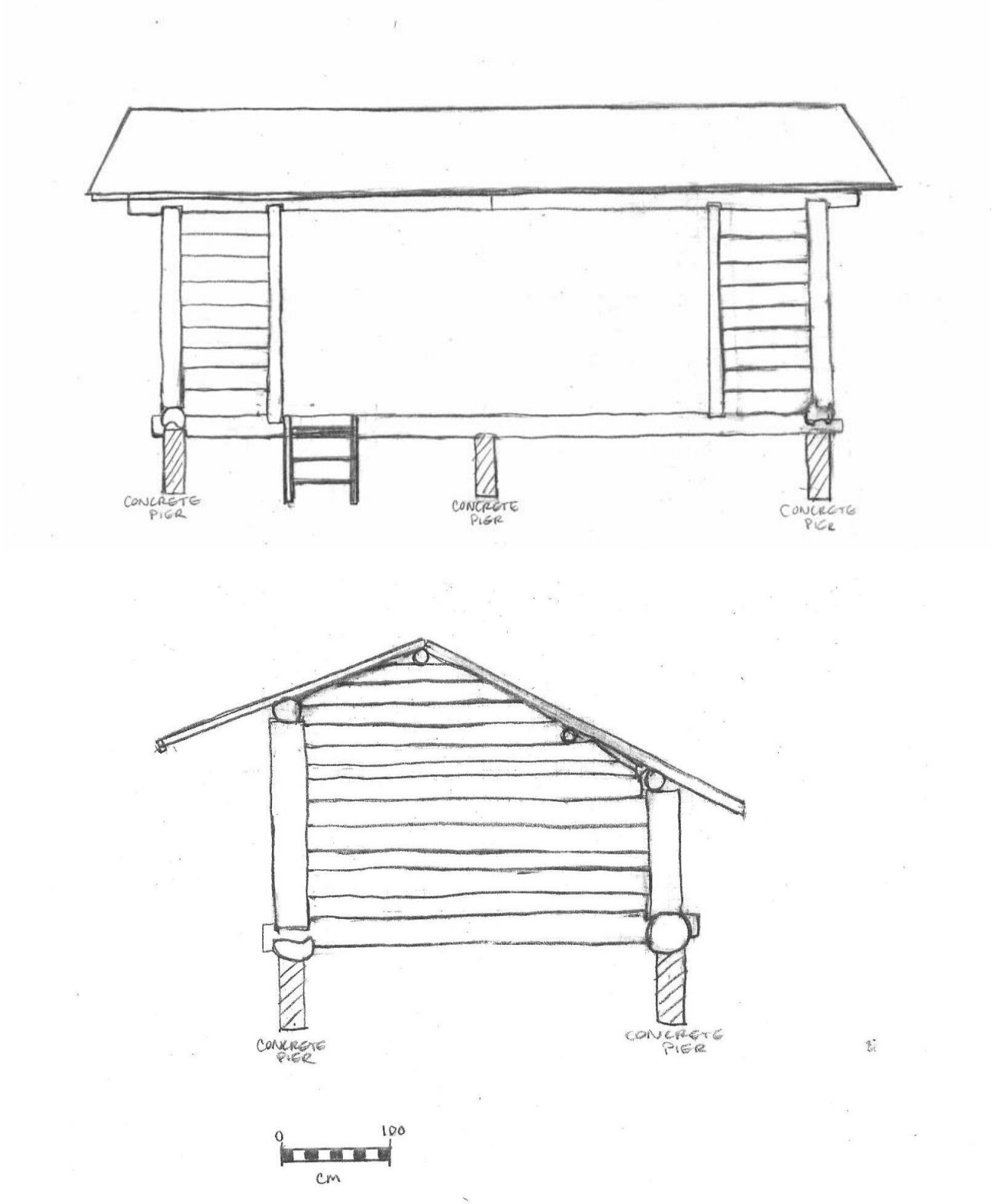


Figure 156. Jeffers Brook shelter drawings. Above: West (front) elevation. Below: South side elevation. May 25, 2011.

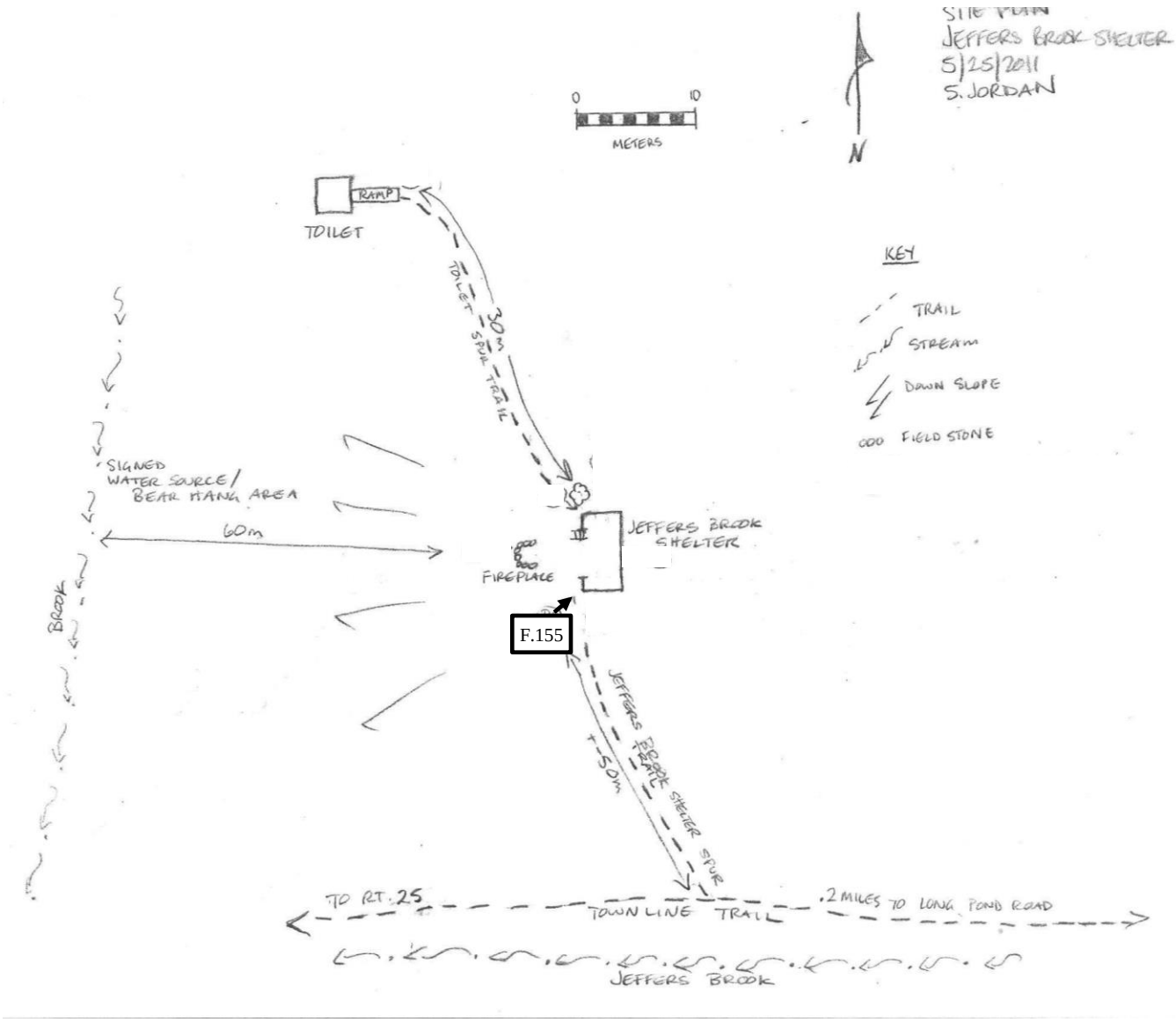


Figure 157. Jeffers Brook shelter sketch map. May 25, 2011.

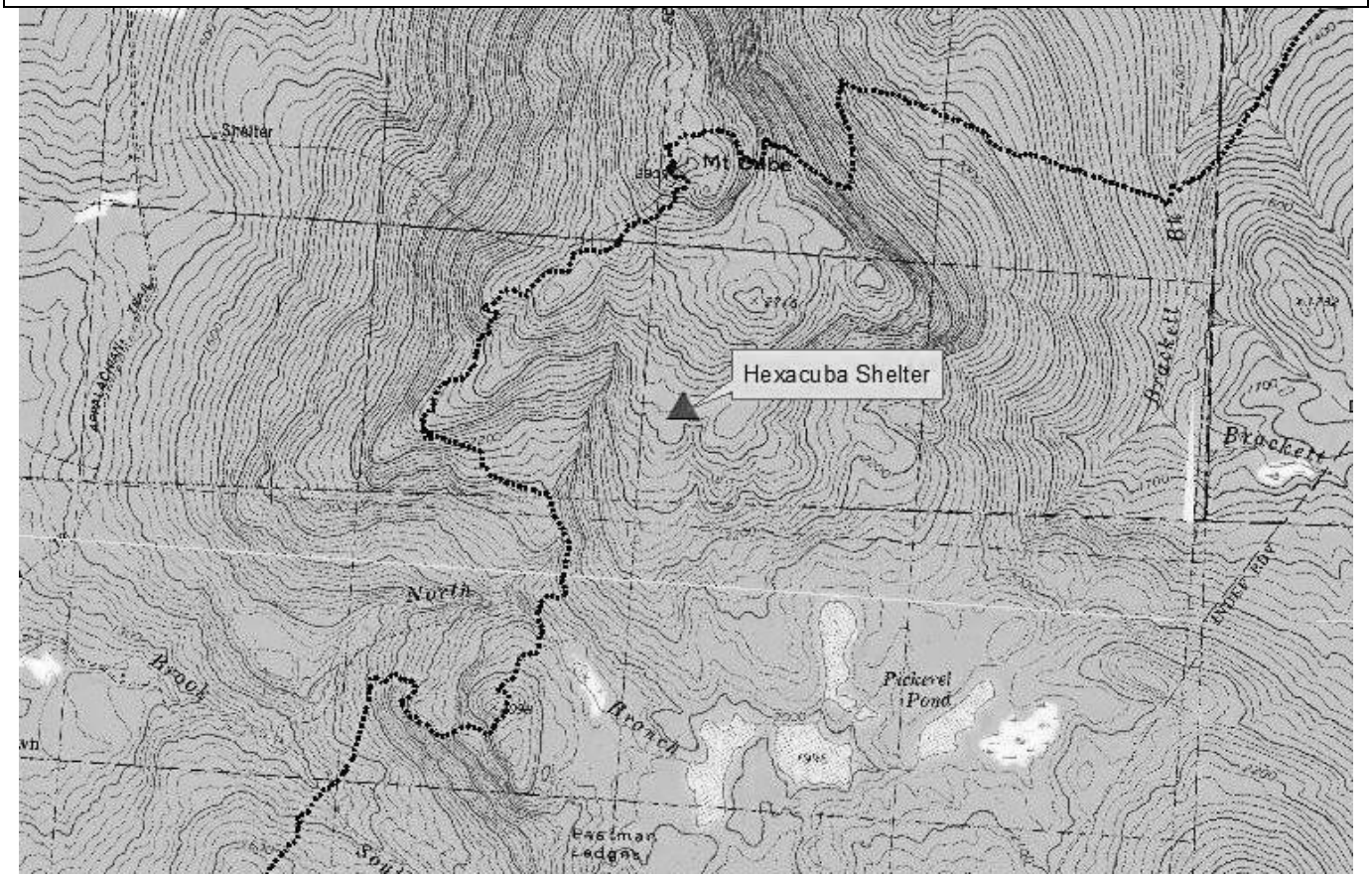


Figure 158. Hexacuba shelter location map. USGS 7.5' Smarts Mt Quadrangle.

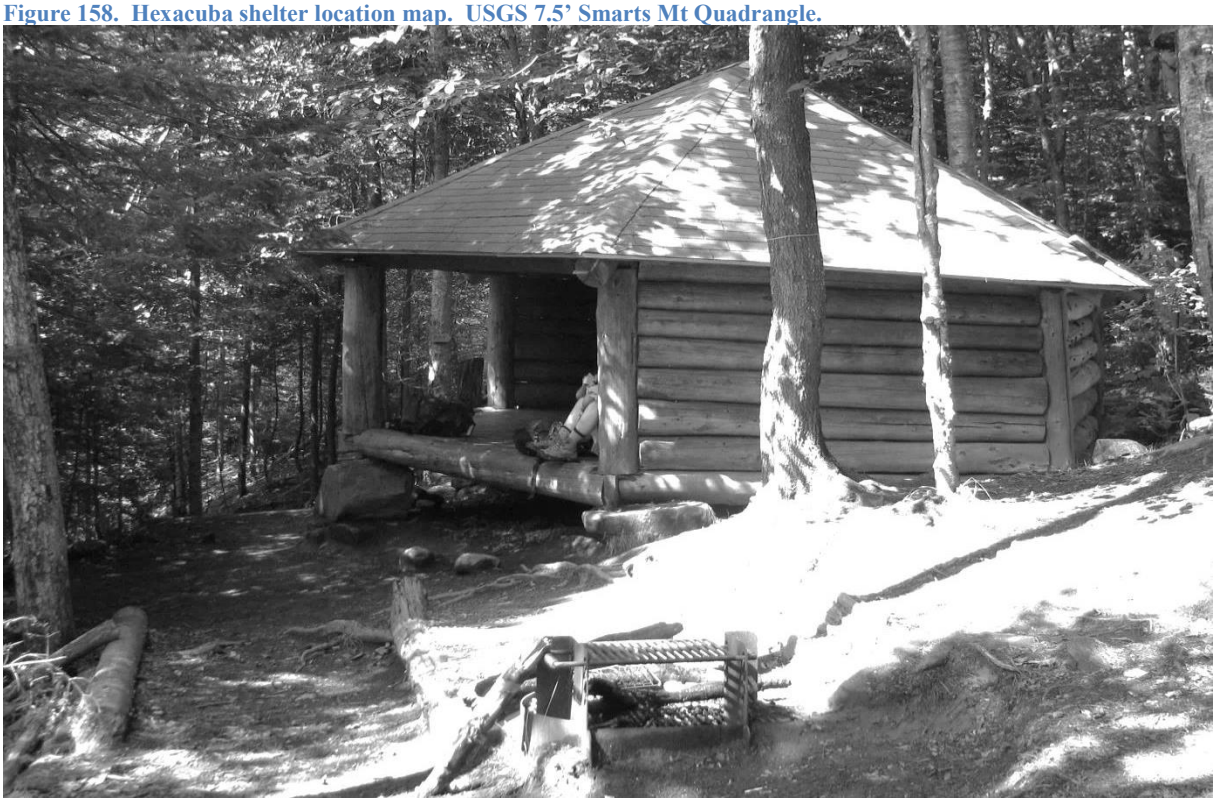


Figure 159. Hexacuba shelter. August 4, 2006 photo courtesy of Susan Schibanoff.

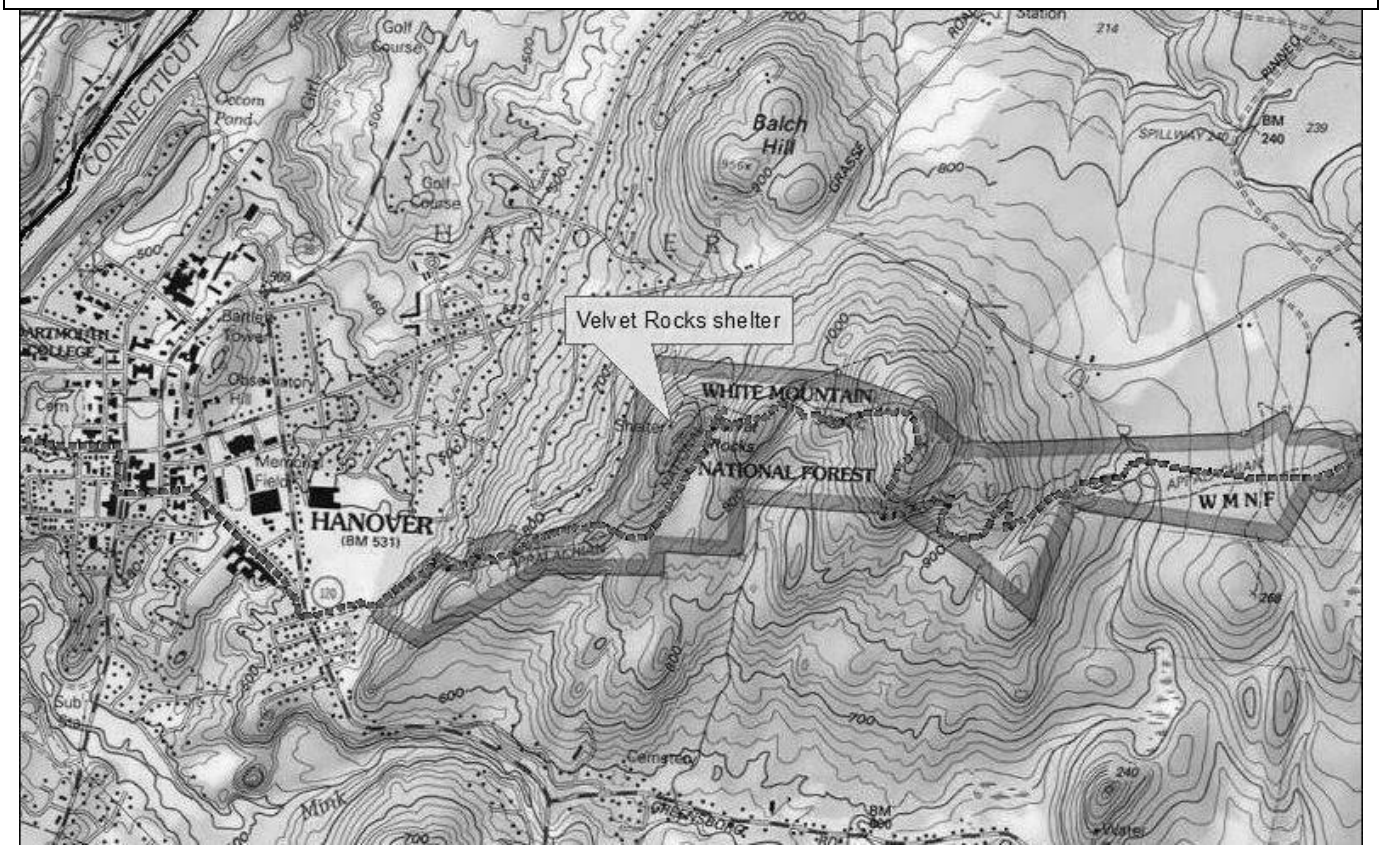


Figure 160. Velvet Rocks shelter location map. USGS 7.5' Hanover Quadrangle.

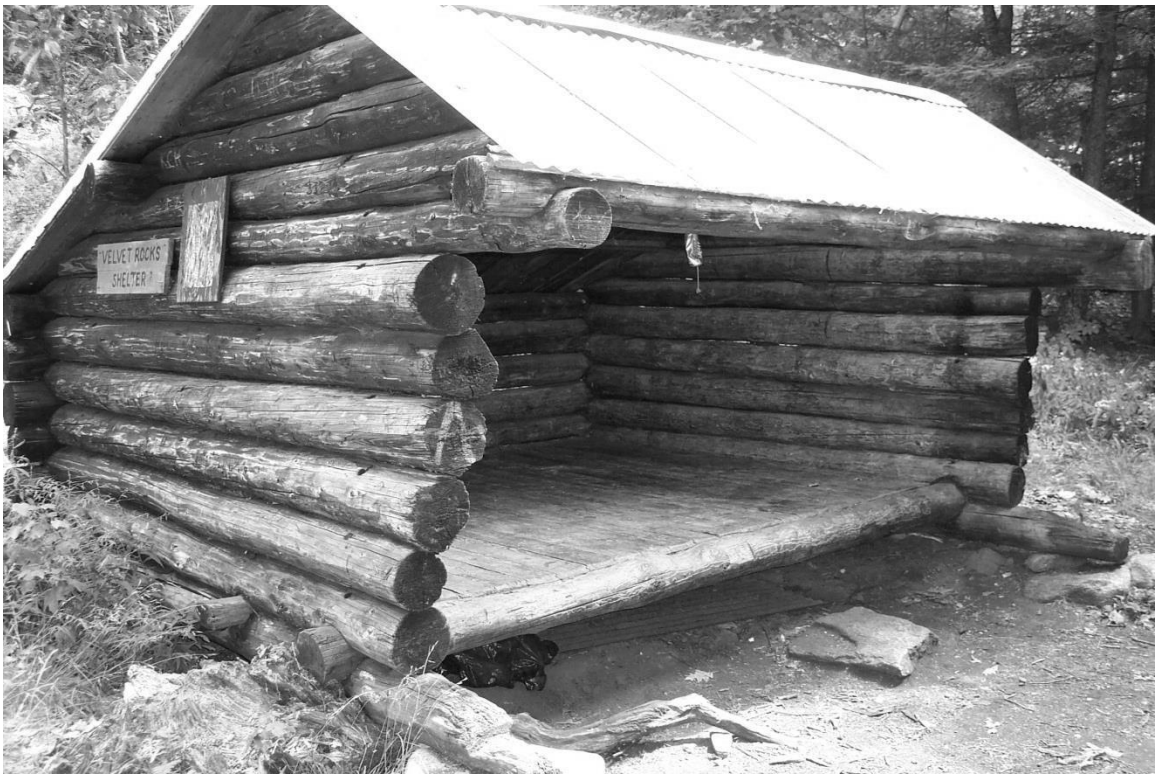


Figure 161. Velvet Rocks shelter (1937-2007). Photo dated August 13, 2005 courtesy of Susan Schibanoff.

Figure 162. Velvet Rocks shelter. Photo from http://www.tombonamici.com/buildings, accessed March 11, 2015.

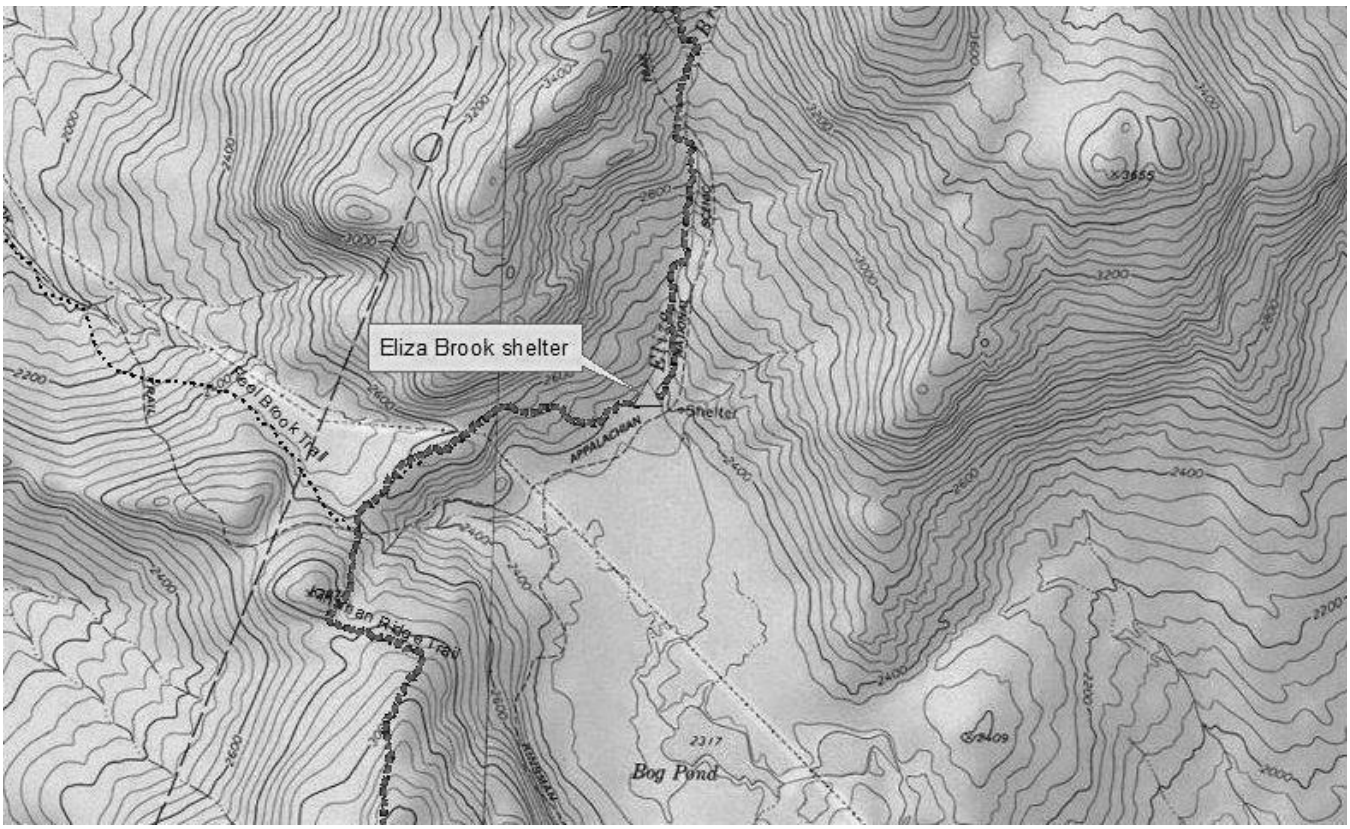


Figure 163. Eliza Brook shelter location map. USGS 7.5' Lincoln Quadrangle.

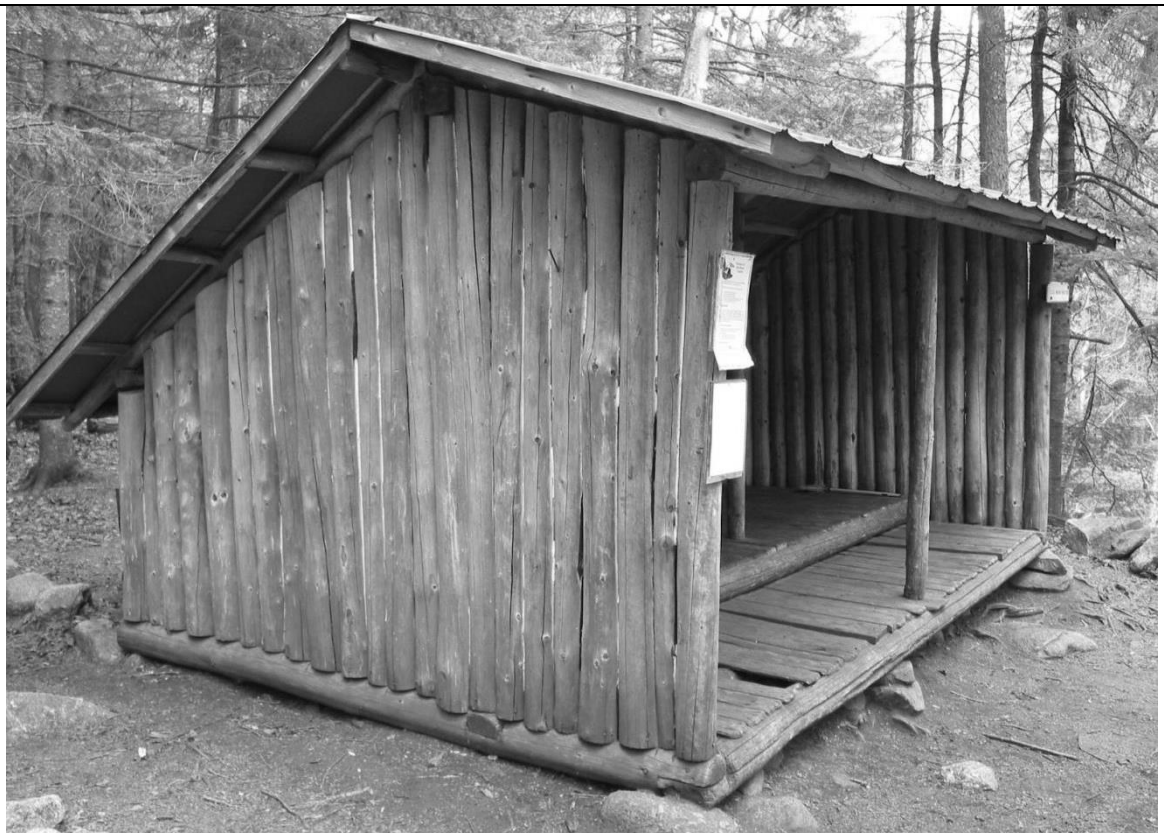


Figure 164. Eliza Brook shelter (1963-2010). View NE. May 25, 2010.

Figure 165. Eliza Brook shelter. View NW. August 5, 2014.

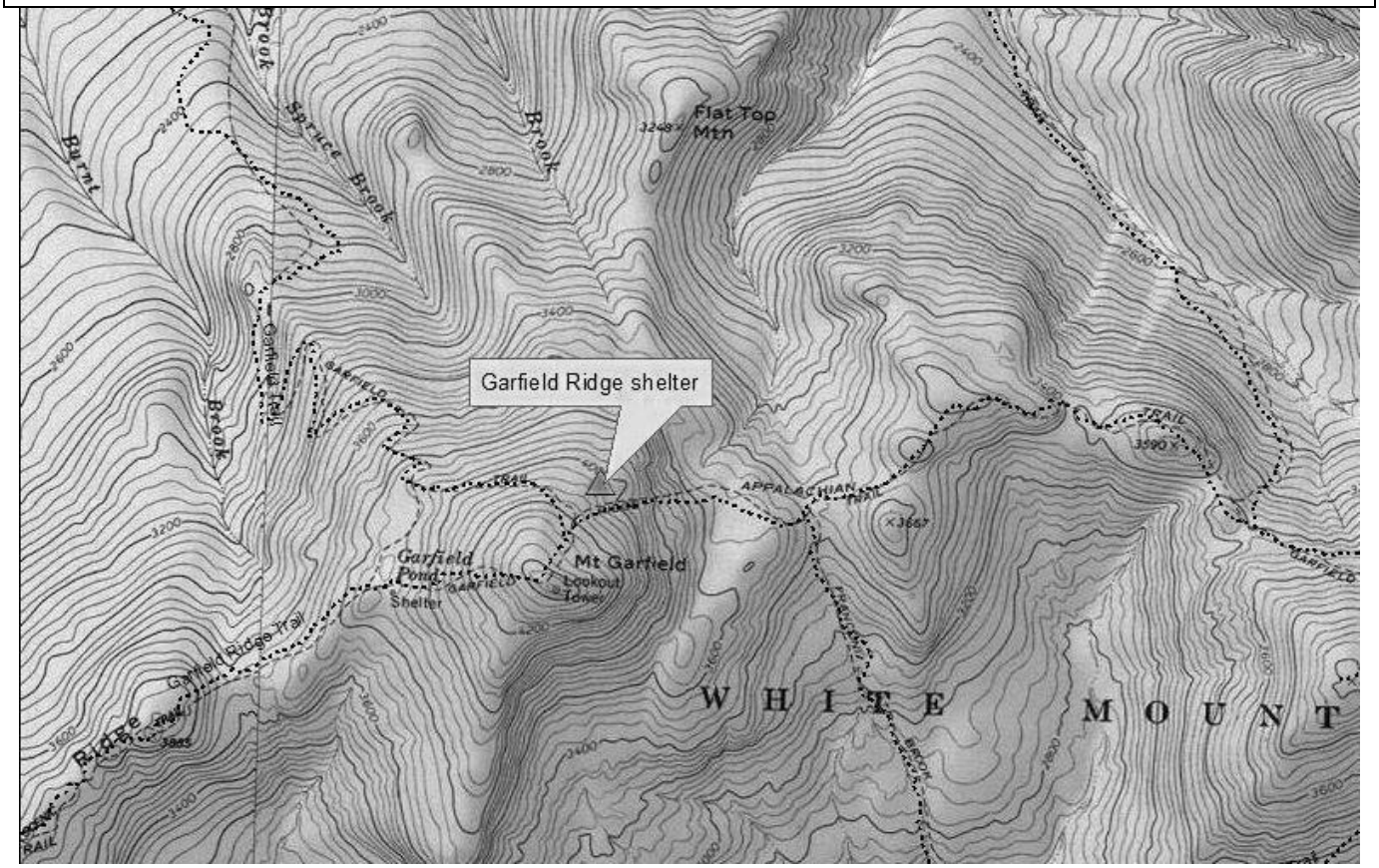


Figure 166. Garfield Ridge shelter location map. USGS 7.5' South Twin Mountain Quadrangle.

Figure 167. Garfield Pond shelters. Log Shed style shelter (left) built 1917, Small-Log Saltbox style shelter (right) built 1924. Undated photo (c.1925-1940) by Leon Keach.

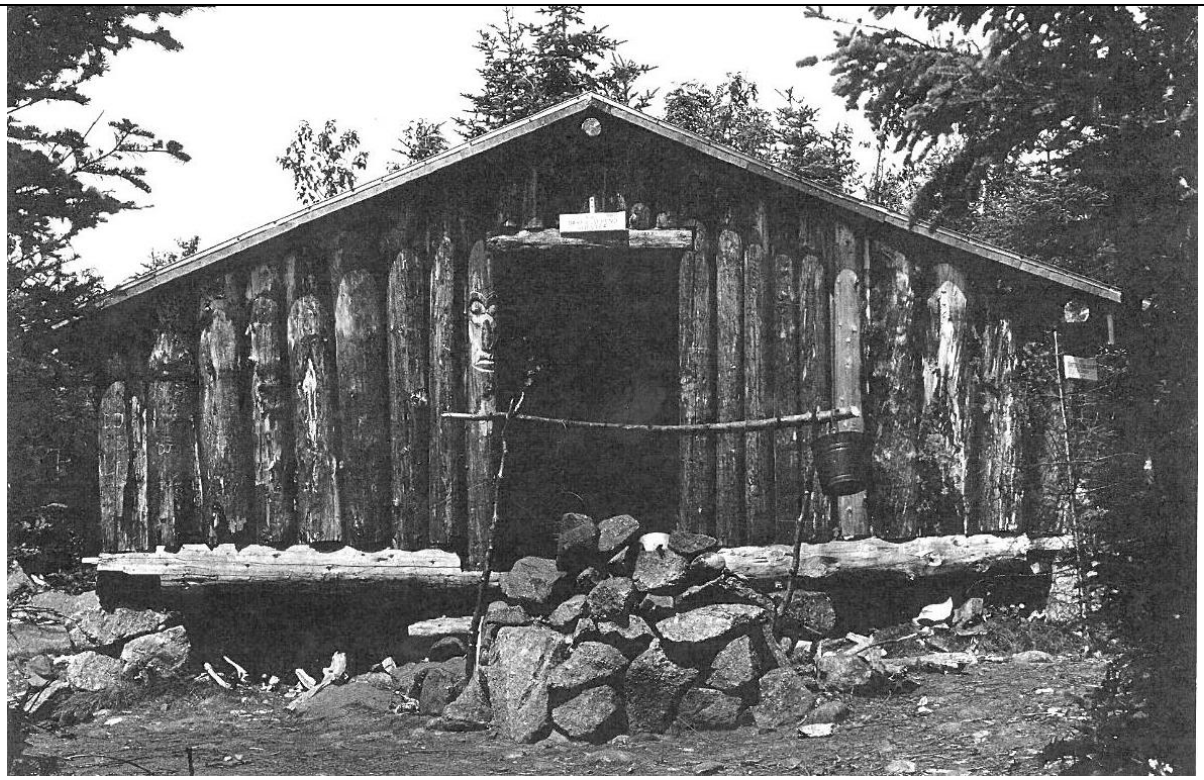


Figure 168. Garfield Pond shelter (1940-1971). Photo c.1965 in Appalachian Mountain Club shelter management files housed at Pinkham Notch Visitor Center, NH.

Figure 169. Garfield Ridge shelter (1971-2011). View SW. June 30, 2011.

Figure 170. Newly constructed Garfield Ridge shelter, 2011. Photo courtesy of Sally Manikian.

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